

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1752YXC

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 01	New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!
NEWS	4	OCT 28	KOREAPAT now available on STN
NEWS	5	NOV 30	PHAR reloaded with additional data
NEWS	6	DEC 01	LISA now available on STN
NEWS	7	DEC 09	12 databases to be removed from STN on December 31, 2004
NEWS	8	DEC 15	MEDLINE update schedule for December 2004
NEWS	9	DEC 17	ELCOM reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	10	DEC 17	COMPUAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	11	DEC 17	SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	12	DEC 17	CERAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	13	DEC 17	THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
NEWS	14	DEC 30	EPFULL: New patent full text database to be available on STN
NEWS	15	DEC 30	CAPLUS - PATENT COVERAGE EXPANDED
NEWS	16	JAN 03	No connect-hour charges in EPFULL during January and February 2005
NEWS	17	FEB 25	CA/CAPLUS - Russian Agency for Patents and Trademarks (ROSPATENT) added to list of core patent offices covered
NEWS	18	FEB 10	STN Patent Forums to be held in March 2005
NEWS	19	FEB 16	STN User Update to be held in conjunction with the 229th ACS National Meeting on March 13, 2005
NEWS	20	FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	21	FEB 28	BABS - Current-awareness alerts (SDIs) available
NEWS	22	FEB 28	MEDLINE/LMEDLINE reloaded
NEWS	23	MAR 02	GBFULL: New full-text patent database on STN
NEWS	24	MAR 03	REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS	25	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS EXPRESS	JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005		
NEWS HOURS	STN Operating Hours Plus Help Desk Availability		
NEWS INTER	General Internet Information		
NEWS LOGIN	Welcome Banner and News Items		
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN		
NEWS WWW	CAS World Wide Web Site (general information)		

Enter NEWS followed by the item number or name to see news on that specific topic.

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result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 12:14:41 ON 07 MAR 2005

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 12:15:00 ON 07 MAR 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 4 MAR 2005 HIGHEST RN 842949-55-7

DICTIONARY FILE UPDATES: 4 MAR 2005 HIGHEST RN 842949-55-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> ....Testing the current file.... screen

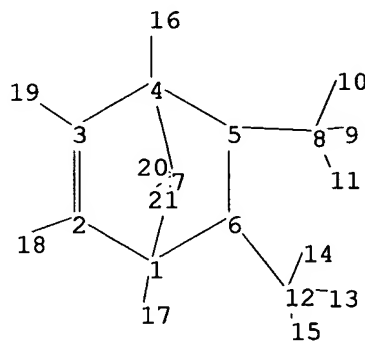
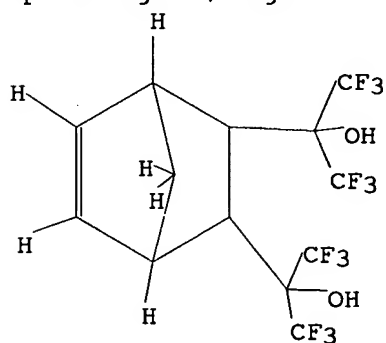
ENTER SCREEN EXPRESSION OR (END):end

=> screen 2067

L1 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10697397-1.str



chain nodes :

8 9 10 11 12 13 14 15 16 17 18 19 20 21

ring nodes :

1 2 3 4 5 6 7

chain bonds :

1-17 2-18 3-19 4-16 5-8 6-12 7-20 7-21 8-9 8-10 8-11 12-15 12-13 12-14

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6

exact/norm bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-9 12-13  
exact bonds :  
1-17 2-18 3-19 4-16 5-8 6-12 7-20 7-21 8-10 8-11 12-15 12-14

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS  
12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS  
21:CLASS

L2 STRUCTURE UPLOADED

=> que L2 AND L1

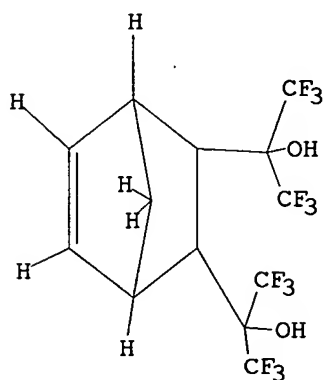
L3 QUE L2 AND L1

=> d

L3 HAS NO ANSWERS

L1 SCR 2067

L2 STR



Structure attributes must be viewed using STN Express query preparation.

L3 QUE ABB=ON PLU=ON L2 AND L1

=> s l3 sss sam

SAMPLE SEARCH INITIATED 12:15:28 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 3 TO ITERATE

100.0% PROCESSED 3 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 3 TO 163

PROJECTED ANSWERS: 0 TO 0

L4 0 SEA SSS SAM L2 AND L1

=> ....Testing the current file.... screen

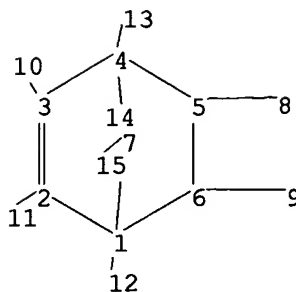
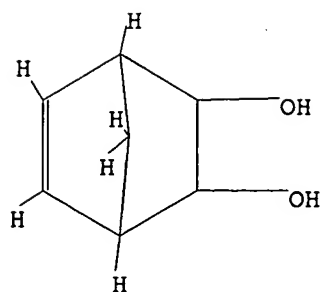
ENTER SCREEN EXPRESSION OR (END):end

=> screen 2067

L5 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10697397-2.str



```

chain nodes :
8 9 10 11 12 13 14 15
ring nodes :
1 2 3 4 5 6 7
chain bonds :
1-12 2-11 3-10 4-13 5-8 6-9 7-14 7-15
ring bonds :
1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6
exact/norm bonds :
1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 5-8 6-9
exact bonds :
1-12 2-11 3-10 4-13 7-14 7-15

```

```

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS

```

L6 STRUCTURE UPLOADED

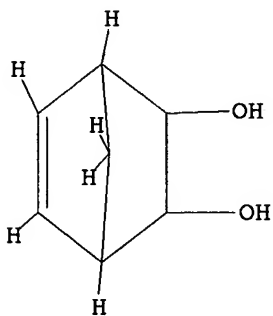
=> que L6 AND L5

L7 QUE L6 AND L5

```

=> d
L7 HAS NO ANSWERS
L5 SCR 2067
L6 STR

```



```

Structure attributes must be viewed using STN Express query preparation.
L7 QUE ABB=ON PLU=ON L6 AND L5

```

```

=> s l7 sss sam
SAMPLE SEARCH INITIATED 12:15:54 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 148 TO ITERATE

```

```

100.0% PROCESSED 148 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

```

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 2231 TO 3689  
 PROJECTED ANSWERS: 0 TO 0

L8 0 SEA SSS SAM L6 AND L5

=> ....Testing the current file.... screen

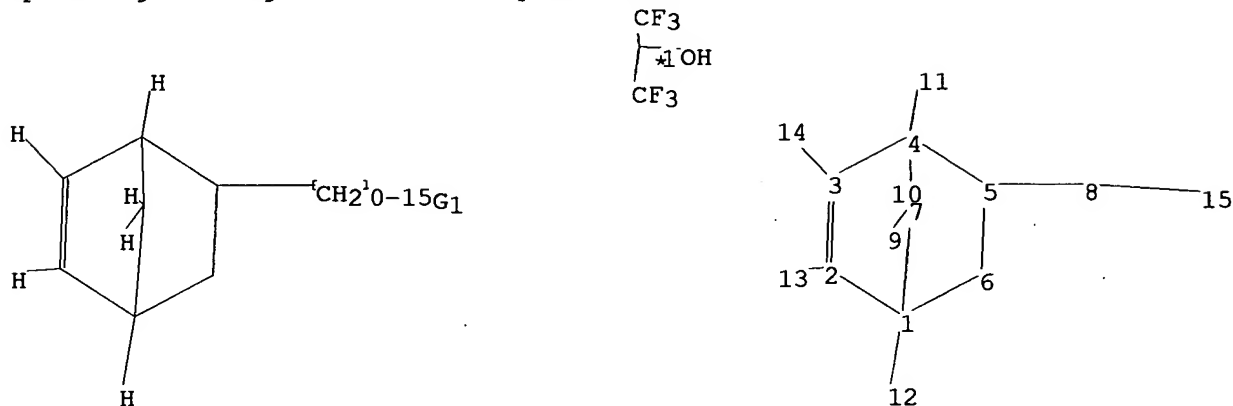
ENTER SCREEN EXPRESSION OR (END):end

=> screen 2067

L9 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10697397-3.str



chain nodes :  
 8 9 10 11 12 13 14 15 19 20 21 22  
 ring nodes :  
 1 2 3 4 5 6 7  
 chain bonds :  
 1-12 2-13 3-14 4-11 5-8 7-9 7-10 8-15 19-20 19-21 19-22  
 ring bonds :  
 1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6  
 exact/norm bonds :  
 1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-15 19-22  
 exact bonds :  
 1-12 2-13 3-14 4-11 5-8 7-9 7-10 19-20 19-21

G1:H,F,CF3,OH, [\*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS  
 12:CLASS 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS

L10 STRUCTURE UPLOADED

=> que L10 AND L9

L11 QUE L10 AND L9

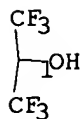
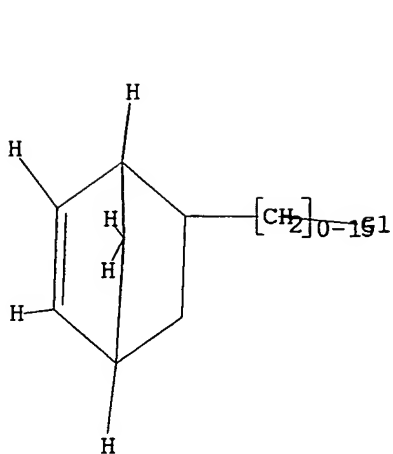
=> d

L11 HAS NO ANSWERS

L9 SCR 2067

L10 STR

20  
 19 22  
 21



G1 H, F, CF3, OH, [01]

Structure attributes must be viewed using STN Express query preparation.  
L11 QUE ABB=ON PLU=ON L10 AND L9

=> s l11 sss sam  
SAMPLE SEARCH INITIATED 12:16:25 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 6622 TO ITERATE

15.1% PROCESSED 1000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

50 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 127562 TO 137318  
PROJECTED ANSWERS: 12824 TO 16046

L12 50 SEA SSS SAM L10 AND L9

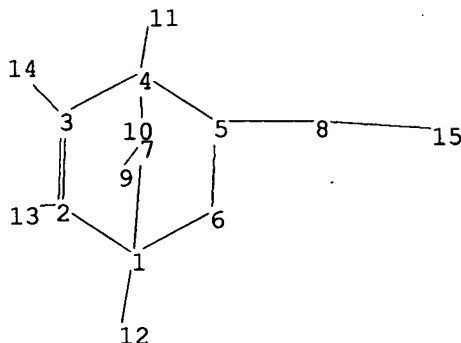
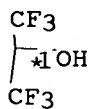
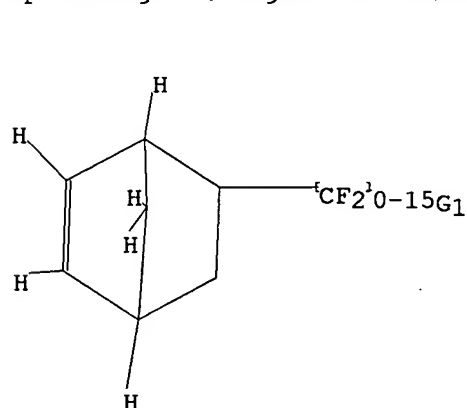
=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 2067

L13 SCREEN CREATED

=>  
Uploading C:\Program Files\Stnexp\Queries\10697397-4.str



20  
19  
21

chain nodes :

8 9 10 11 12 13 14 15 19 20 21 22  
 ring nodes :  
 1 2 3 4 5 6 7  
 chain bonds :  
 1-12 2-13 3-14 4-11 5-8 7-9 7-10 8-15 19-20 19-21 19-22  
 ring bonds :  
 1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6  
 exact/norm bonds :  
 1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-15 19-22  
 exact bonds :  
 1-12 2-13 3-14 4-11 5-8 7-9 7-10 19-20 19-21

G1:H,F,CF3,OH, [\*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS  
 12:CLASS 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS

L14 STRUCTURE UPLOADED

=> que L14 AND L13

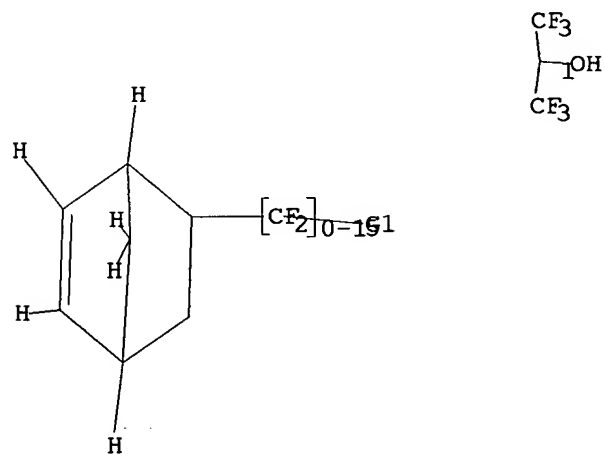
L15 QUE L14 AND L13

=> d

L15 HAS NO ANSWERS

L13 SCR 2067

L14 STR



G1 H,F,CF3,OH, [@1]

Structure attributes must be viewed using STN Express query preparation.

L15 QUE ABB=ON PLU=ON L14 AND L13

=> s l15 sss sam

SAMPLE SEARCH INITIATED 12:17:05 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 6622 TO ITERATE

15.1% PROCESSED 1000 ITERATIONS  
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
 SEARCH TIME: 00.00.01

50 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 127562 TO 137318

L16 50 SEA SSS SAM L14 AND L13

=> ....Testing the current file.... screen

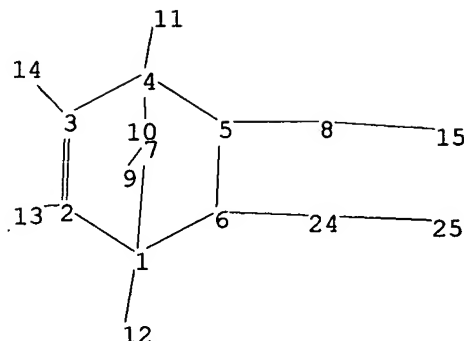
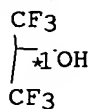
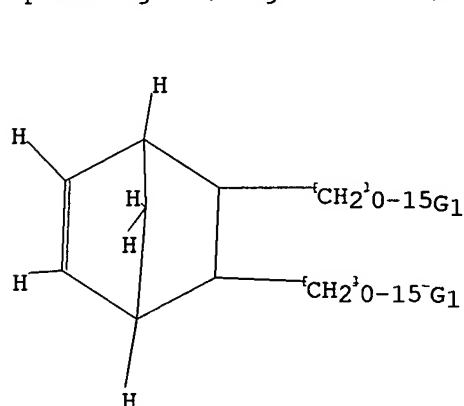
ENTER SCREEN EXPRESSION OR (END):end

=> screen 2067

L17 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10697397-5.str



20  
19  
22  
21

chain nodes :

8 9 10 11 12 13 14 15 19 20 21 22 24 25

ring nodes :

1 2 3 4 5 6 7

chain bonds :

1-12 2-13 3-14 4-11 5-8 6-24 7-9 7-10 8-15 19-20 19-21 19-22 24-25

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6

exact/norm bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-15 19-22 24-25

exact bonds :

1-12 2-13 3-14 4-11 5-8 6-24 7-9 7-10 19-20 19-21

G1:H,F,CF3,OH, [\*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS  
12:CLASS 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 24:CLASS  
25:CLASS

L18 STRUCTURE UPLOADED

=> que L18 AND L17

L19 QUE L18 AND L17

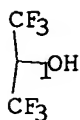
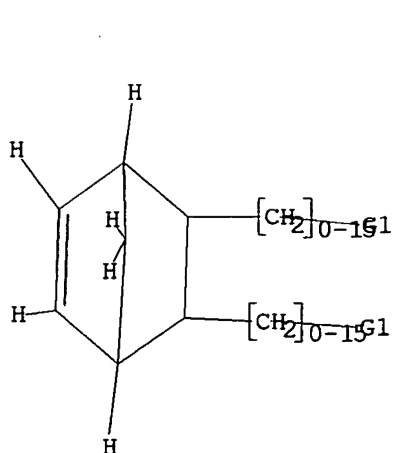
=> d

L19 HAS NO ANSWERS

L17 SCR 2067

L18 STR





G1 H, F, CF3, OH, [G1]

Structure attributes must be viewed using STN Express query preparation.  
L19 QUE ABB=ON PLU=ON L18 AND L17

=> s l19 sss sam  
STRUCTURE TOO LARGE - SEARCH ENDED  
A structure in your query is too large. You may delete attributes or atoms to reduce the size of the structure and try again.

=> s l18 sss sam  
STRUCTURE TOO LARGE - SEARCH ENDED  
A structure in your query is too large. You may delete attributes or atoms to reduce the size of the structure and try again.

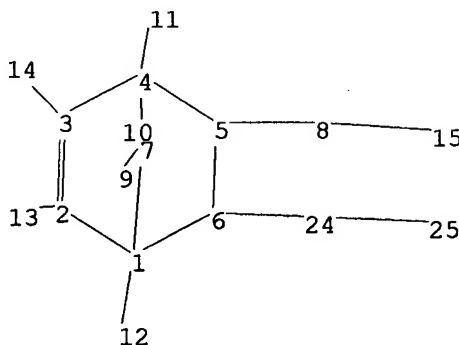
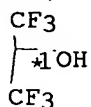
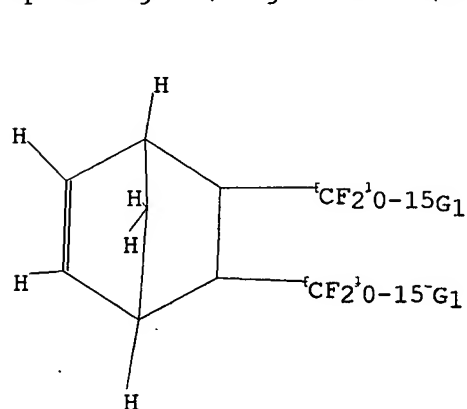
=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 2067

L20 SCREEN CREATED

=>  
Uploading C:\Program Files\Stnexp\Queries\10697397-6.str



20  
19 22  
21

chain nodes :  
8 9 10 11 12 13 14 15 19 20 21 22 24 25  
ring nodes :  
1 2 3 4 5 6 7

chain bonds :  
 1-12 2-13 3-14 4-11 5-8 6-24 7-9 7-10 8-15 19-20 19-21 19-22 24-25  
 ring bonds :  
 1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6  
 exact/norm bonds :  
 1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-15 19-22 24-25  
 exact bonds :  
 1-12 2-13 3-14 4-11 5-8 6-24 7-9 7-10 19-20 19-21

G1:H,F,CF3,OH, [\*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS  
 12:CLASS 13:CLASS 14:CLASS 15:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 24:CLASS  
 25:CLASS

L21 STRUCTURE UPLOADED

=> que L21 AND L20

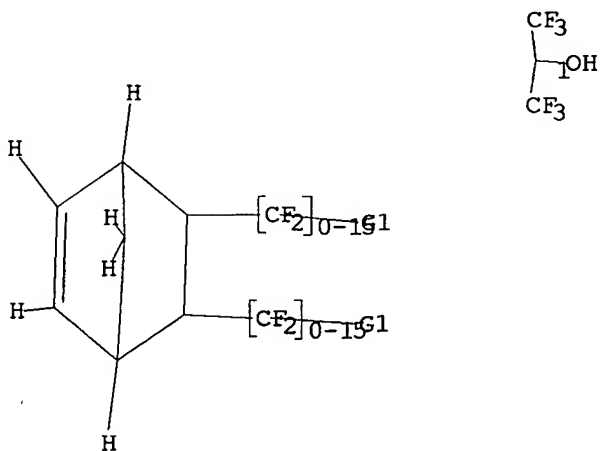
L22 QUE L21 AND L20

=> d

L22 HAS NO ANSWERS

L20 SCR 2067

L21 STR



G1 H,F,CF3,OH, [@1]

Structure attributes must be viewed using STN Express query preparation.

L22 QUE ABB=ON PLU=ON L21 AND L20

=> s l22 sss sam

STRUCTURE TOO LARGE - SEARCH ENDED

A structure in your query is too large. You may delete attributes or atoms to reduce the size of the structure and try again.

=> ....Testing the current file.... screen

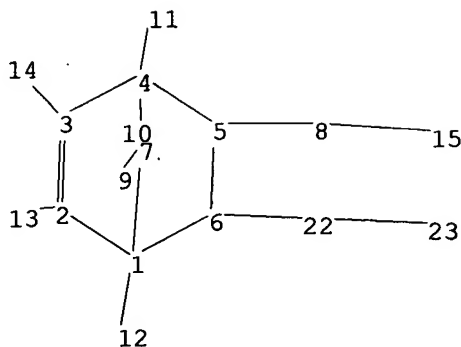
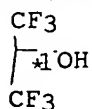
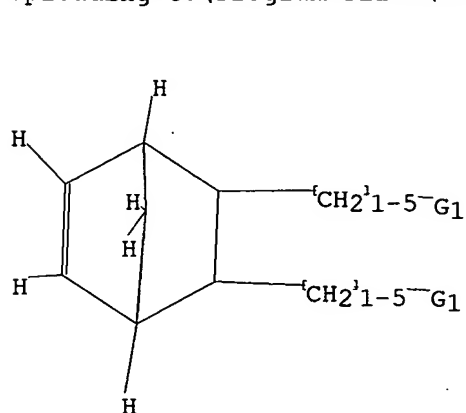
ENTER SCREEN EXPRESSION OR (END):end

=> screen 2067

L23 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\10697397-7.str



18  
17  
19

chain nodes :

8 9 10 11 12 13 14 15 17 18 19 20 22 23

ring nodes :

1 2 3 4 5 6 7

chain bonds :

1-12 2-13 3-14 4-11 5-8 6-22 7-9 7-10 8-15 17-18 17-19 17-20 22-23

ring bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6

exact/norm bonds :

1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-15 17-20 22-23

exact bonds :

1-12 2-13 3-14 4-11 5-8 6-22 7-9 7-10 17-18 17-19

G1:H,F,CF3,OH, [\*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS  
12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 22:CLASS  
23:CLASS

L24 STRUCTURE. UPLOADED

=> que L24 AND L23

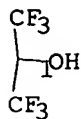
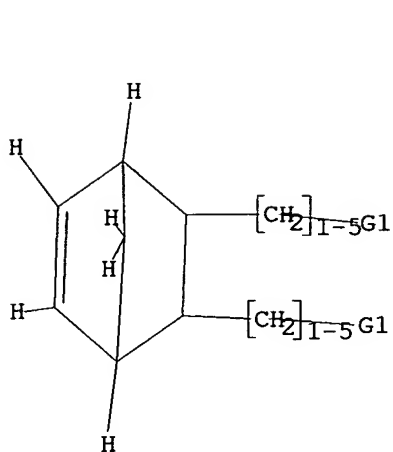
L25 QUE L24 AND L23

=> d

L25 HAS NO ANSWERS

L23 SCR 2067

L24 STR



G1 H, F, CF3, OH, [01]

Structure attributes must be viewed using STN Express query preparation.  
L25 QUE ABB=ON PLU=ON L24 AND L23

=> s 125 sss sam  
SAMPLE SEARCH INITIATED 12:20:42 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 5344 TO ITERATE

18.7% PROCESSED 1000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

4 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 102497 TO 111263  
PROJECTED ANSWERS: 150 TO 704

L26 4 SEA SSS SAM L24 AND L23

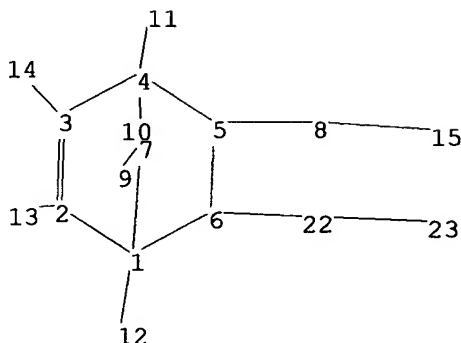
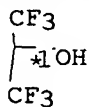
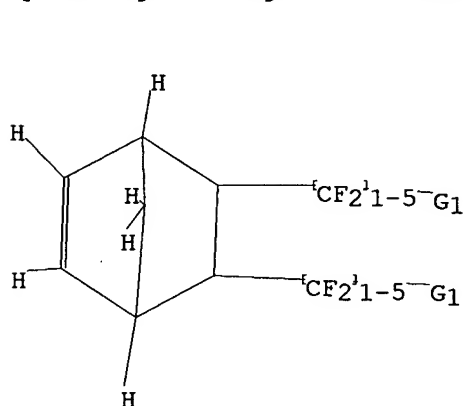
=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 2067

L27 SCREEN CREATED

=>  
Uploading C:\Program Files\Stnexp\Queries\10697397-8.str



18  
17  
19  
20

chain nodes :

8 9 10 11 12 13 14 15 17 18 19 20 22 23  
 ring nodes :  
 1 2 3 4 5 6 7  
 chain bonds :  
 1-12 2-13 3-14 4-11 5-8 6-22 7-9 7-10 8-15 17-18 17-19 17-20 22-23  
 ring bonds :  
 1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6  
 exact/norm bonds :  
 1-2 1-6 1-7 2-3 3-4 4-5 4-7 5-6 8-15 17-20 22-23  
 exact bonds :  
 1-12 2-13 3-14 4-11 5-8 6-22 7-9 7-10 17-18 17-19

G1:H,F,CF3,OH, [\*1]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:CLASS 10:CLASS 11:CLASS  
 12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 22:CLASS  
 23:CLASS

L28 STRUCTURE UPLOADED

=> que L28 AND L27

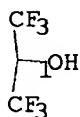
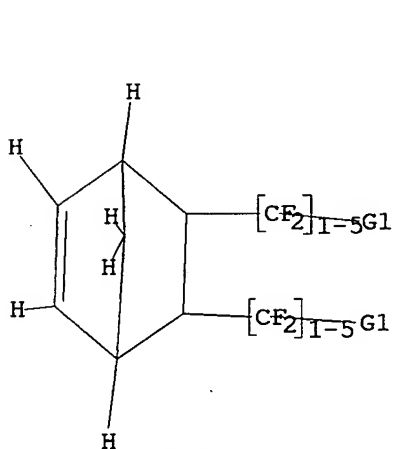
L29 QUE L28 AND L27

=> d

L29 HAS NO ANSWERS

L27 SCR 2067

L28 STR



G1 H,F,CF3,OH, [@1]

Structure attributes must be viewed using STN Express query preparation.  
 L29 QUE ABB=ON PLU=ON L28 AND L27

=> s l29 sss sam

SAMPLE SEARCH INITIATED 12:22:16 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 141 TO ITERATE

100.0% PROCESSED 141 ITERATIONS  
 SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 2108 TO 3532

L30 0 SEA SSS SAM L28 AND L27

=> FIL HCAPLUS, CAPLUS, USPATFULL  
COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
5.16	5.37

FILE 'HCAPLUS' ENTERED AT 12:22:28 ON 07 MAR 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CAPLUS' ENTERED AT 12:22:28 ON 07 MAR 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 12:22:28 ON 07 MAR 2005  
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l4 or l8 or l12 or l16 or l26 or l30  
L31 233 L4 OR L8 OR L12 OR L16 OR L26 OR L30

=> s photoresist or resist  
L32 454502 PHOTORESIST OR RESIST

=> s l31 and l32  
L33 148 L31 AND L32

=> duplicates remove l33  
DUPLICATE PREFERENCE IS 'HCAPLUS, CAPLUS, USPATFULL'  
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n  
PROCESSING COMPLETED FOR L33  
L34 86 DUPLICATE REMOVE L33 (62 DUPLICATES REMOVED)

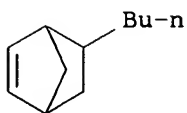
=> d l34 1-86 ibib hitstr

L34 ANSWER 1 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1  
ACCESSION NUMBER: 2005:123212 HCAPLUS  
DOCUMENT NUMBER: 142:198529  
TITLE: Low polydispersity resin and preparation thereof using  
chain-transfer agents  
INVENTOR(S): Lee, Ting-Yu; Yu, Choa-Ying; Hsu, Meei-Yu; Wang,  
Shian-Jy; Ting, Ching; Shih, Kuo-Chen  
PATENT ASSIGNEE(S): Taiwan  
SOURCE: U.S. Pat. Appl. Publ., 13 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005032997	A1	20050210	US 2003-714052	20031114
PRIORITY APPLN. INFO.:			TW 2003-92121346	A 20030805
IT 254751-22-9P				
RL: IMF (Industrial manufacture); PREP (Preparation)				
(low polydispersity resin and preparation thereof using chain-transfer agents)				
RN 254751-22-9 HCAPLUS				
CN 2-Propenoic acid, methyl ester, polymer with 5-butylbicyclo[2.2.1]hept-2-ene (9CI) (CA INDEX NAME)				

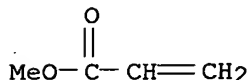
CM 1

CRN 22094-81-1  
CMF C11 H18



CM 2

CRN 96-33-3  
CMF C4 H6 O2



L34 ANSWER 2 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2

ACCESSION NUMBER: 2004:740363 HCAPLUS

DOCUMENT NUMBER: 141:261444

TITLE: Vinyl addition polycyclic olefin polymers prepared with non-olefinic chain transfer agents and their uses in **photoresist**

INVENTOR(S): Rhodes, Larry F.; Barnes, Dennis A.; Bell, Andrew; Bennett, Brian K.; Chang, Chung; Lipian, John-Henry; Wu, Xiaoming

PATENT ASSIGNEE(S): Promerus Llc, USA

SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004076495	A2	20040910	WO 2004-US5002	20040220
WO 2004076495	A3	20041028		
W:	AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2004229157	A1	20041118	US 2004-782547	20040219
PRIORITY APPLN. INFO.:			US 2003-448939P	P 20030221
			US 2004-782547	A 20040219

OTHER SOURCE(S): MARPAT 141:261444

IT 754231-22-6P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(vinyl addition polycyclic olefin polymers prepared with non-olefinic chain transfer agents and their uses in **photoresist**)

RN 754231-22-6 HCAPLUS

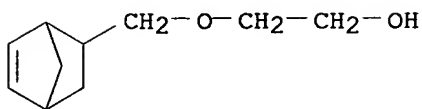
CN Bicyclo[2.2.1]hept-5-ene-2-ethanol,  $\alpha,\alpha$ -bis(trifluoromethyl)-, polymer with 2-(bicyclo[2.2.1]hept-5-en-2-ylmethoxy)ethanol (9CI) (CA

INDEX NAME)

CM 1

CRN 754231-21-5

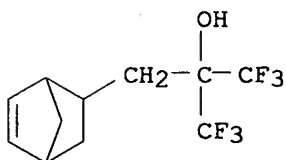
CMF C10 H16 O2



CM 2

CRN 196314-61-1

CMF C11 H12 F6 O



L34 ANSWER 3 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2004:252554 HCAPLUS

DOCUMENT NUMBER: 140:254085

TITLE: Process for production of fluoropolymers for  
**resist**

INVENTOR(S): Araki, Takayuki; Ishikawa, Takuji; Koh, Meiten;  
Toriumi, Minoru; Yamazaki, Tamio; Furukawa, Takamitsu;  
Itani, Toshiro

PATENT ASSIGNEE(S): Daikin Industries, Ltd., Japan; Semiconductor Leading  
Edge Technologies, Inc.

SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004024787	A1	20040325	WO 2003-JP11605	20030911
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			JP 2002-268739	A 20020913
			JP 2003-44455	A 20030221

OTHER SOURCE(S): MARPAT 140:254085

IT 669775-29-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(process for production of fluoropolymers for **resist**)

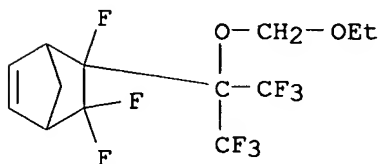
RN 669775-29-5 HCAPLUS



CN Bicyclo[2.2.1]hept-2-ene, 5-[1-(ethoxymethoxy)-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-5,6,6-trifluoro-, polymer with tetrafluoroethene (9CI) (CA INDEX NAME)

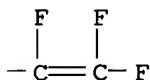
CM 1

CRN 484649-18-5  
CMF C13 H13 F9 O2



CM 2

CRN 116-14-3  
CMF C2 F4



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 4 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 2004:219904 HCAPLUS

DOCUMENT NUMBER: 140:278420

TITLE: Chemical amplification type **photoresist** composition

INVENTOR(S): Kanna, Shinichi; Mizutani, Kazuyoshi; Sasaki, Tomoya

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 44 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004053161	A1	20040318	US 2003-642182	20030818
US 6830871	B2	20041214		
JP 2004102264	A2	20040402	JP 2003-294268	20030818
PRIORITY APPLN. INFO.:			JP 2002-238122	A 20020819

IT **672937-74-5P**

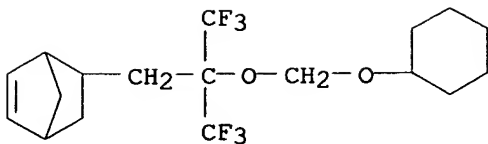
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(chemical amplification type **resist** composition containing)

RN 672937-74-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-ethanol,  $\alpha,\alpha$ -bis(trifluoromethyl)-, polymer with 5-[2-[(cyclohexyloxy)methoxy]-3,3,3-trifluoro-2-(trifluoromethyl)propyl]bicyclo[2.2.1]hept-2-ene and tetrafluoroethene (9CI) (CA INDEX NAME)

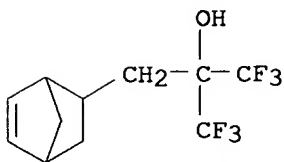
CM 1

CRN 672937-66-5  
CMF C18 H24 F6 O2



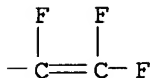
CM 2

CRN 196314-61-1  
CMF C11 H12 F6 O



CM 3

CRN 116-14-3  
CMF C2 F4



L34 ANSWER 5 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 5

ACCESSION NUMBER: 2004:100629 HCAPLUS

DOCUMENT NUMBER: 140:154467

TITLE: **Photoresists**, polymers and processes for microlithography

INVENTOR(S): Feiring, Andrew E.; Schadt, Frank L.

PATENT ASSIGNEE(S): E. I. Du Pont De Nemours and Company, USA

SOURCE: U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S. Ser. No. 806,096.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004023150	A1	20040205	US 2002-108935	20020327
US 6849377	B2	20050201		
WO 2000017712	A1	20000330	WO 1999-US21912	19990921
W:	AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6593058	B1	20030715	US 2001-806096	20010323
PRIORITY APPLN. INFO.:			US 1998-101502P	P 19980923
			WO 1999-US21912	A1 19990921
			US 2001-806096	A2 20010323
			US 2001-280268P	P 20010330

IT 262617-09-4P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(polymers and processes for **photoresists** and microlithog.)

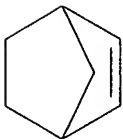
RN 262617-09-4 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, polymer with bicyclo[2.2.1]hept-2-ene and tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 498-66-8

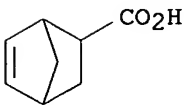
CMF C7 H10



CM 2

CRN 120-74-1

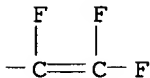
CMF C8 H10 O2



CM 3

CRN 116-14-3

CMF C2 F4



L34 ANSWER 6 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 6

ACCESSION NUMBER: 2004:550129 HCAPLUS

DOCUMENT NUMBER: 141:114064

TITLE: Positive-working **resist** composition containing base compound having one or more cyclic ether group for improved line edge roughness

INVENTOR(S): Fujimori, Toru

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 91 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004191649	A2	20040708	JP 2002-359631	20021211
PRIORITY APPLN. INFO.:			JP 2002-359631	20021211

IT 398141-14-5

RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)

(pos.-working **resist** composition containing base compound having one or  
more cyclic ether group for improved line edge roughness)

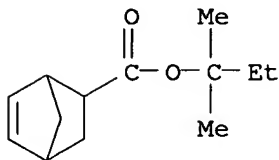
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

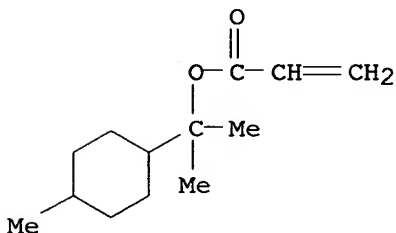
CMF C13 H20 O2



CM 2

CRN 342648-11-7

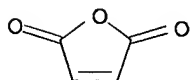
CMF C13 H22 O2



CM 3

CRN 108-31-6

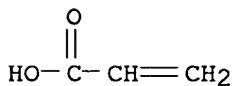
CMF C4 H2 O3



CM 4

CRN 79-10-7

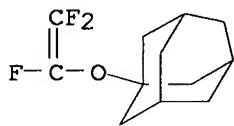
CMF C3 H4 O2



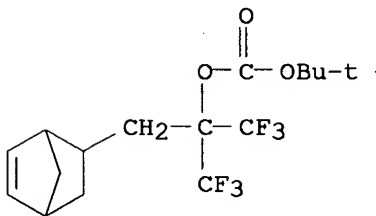
TITLE: F2 excimer laser-sensitive positive  
**photoresist** compositions with good coatability  
 and dry etchability  
 INVENTOR(S): Kanna, Shinichi; Mizutani, Kazuyoshi; Sasaki, Tomoya  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 65 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004138887	A2	20040513	JP 2002-304421	20021018
PRIORITY APPLN. INFO.:			JP 2002-304421	20021018

IT **685523-13-1**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (F2 excimer laser-sensitive pos. **photoresists** with good  
 coatability and dry etchability)  
 RN 685523-13-1 HCAPLUS  
 CN Carbonic acid, 1-(bicyclo[2.2.1]hept-5-en-2-ylmethyl)-2,2,2-trifluoro-1-  
 (trifluoromethyl)ethyl 1,1-dimethylethyl ester, polymer with  
 1-[(trifluoroethenyl)oxy]tricyclo[3.3.1.1<sup>3,7</sup>]decane (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 685522-91-2  
 CMF C12 H15 F3 O



CM 2  
 CRN 196314-63-3  
 CMF C16 H20 F6 O3



L34 ANSWER 8 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 8  
 ACCESSION NUMBER: 2004:307727 HCAPLUS  
 DOCUMENT NUMBER: 140:347500  
 TITLE: Positive-working **resists** suppressing  
 development defects and forming precision square  
 profiles  
 INVENTOR(S): Fujimori, Toru  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 69 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004117677	A2	20040415	JP 2002-279190	20020925
PRIORITY APPLN. INFO.:			JP 2002-279190	20020925

IT 398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses)  
(chemical amplified pos. **resists** containing carbonyloxycarbonyl-  
containing long-chain hydrocarbons and suppressing development defects)

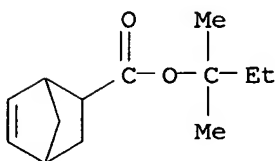
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

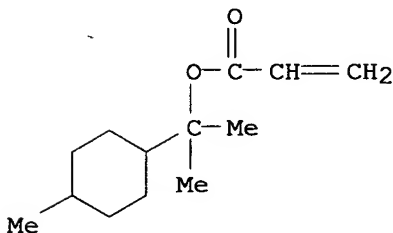
CMF C13 H20 O2



CM 2

CRN 342648-11-7

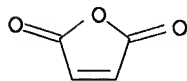
CMF C13 H22 O2



CM 3

CRN 108-31-6

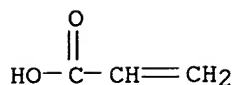
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



L34 ANSWER 9 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 9

ACCESSION NUMBER: 2004:118481 HCAPLUS

DOCUMENT NUMBER: 140:189982

TITLE: Positive **photoresist** composition with good post exposure delay stability and **resist** profile

INVENTOR(S): Fujimori, Toru

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 76 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004045856	A2	20040212	JP 2002-204340	20020712
PRIORITY APPLN. INFO.:			JP 2002-204340	20020712

IT **398141-14-5P**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (pos. **photoresist** composition with good post exposure delay stability and **resist** profile)

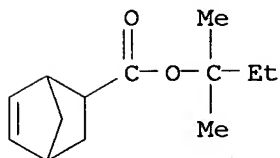
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

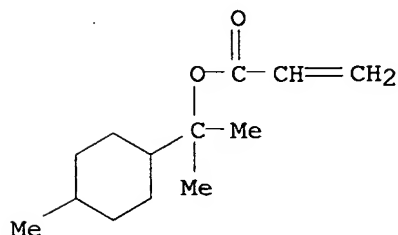
CMF C13 H20 O2



CM 2

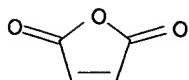
CRN 342648-11-7

CMF C13 H22 O2



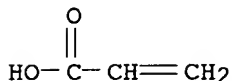
CM 3

CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 79-10-7  
CMF C3 H4 O2



L34 ANSWER 10 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 10

ACCESSION NUMBER: 2004:753223 HCAPLUS

DOCUMENT NUMBER: 141:268557

TITLE: Positive **resist** composition and method of forming a **resist** pattern using the same

INVENTOR(S): Sasaki, Tomoya

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 80 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1457819	A2	20040915	EP 2004-4961	20040303
EP 1457819	A3	20041020		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
JP 2004279471	A2	20041007	JP 2003-67010	20030312
PRIORITY APPLN. INFO.:			JP 2003-67010	A 20030312

IT 756532-47-5P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pos. **photoresist** composition for forming **resist** pattern)

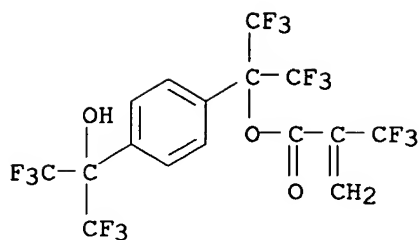
RN 756532-47-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-(trifluoromethyl)-, 3,5-dihydroxytricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester, polymer with 1-ethenyl-3,5-bis[1-(ethoxymethoxy)-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]benzene and 2,2,2-trifluoro-1-[4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]phenyl]-1-(trifluoromethyl)ethyl 2-(trifluoromethyl)-2-propenoate (9CI) (CA INDEX NAME)

CM 1

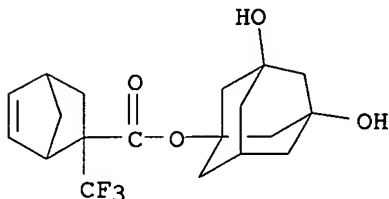
CRN 756532-46-4  
CMF C16 H7 F15 O3





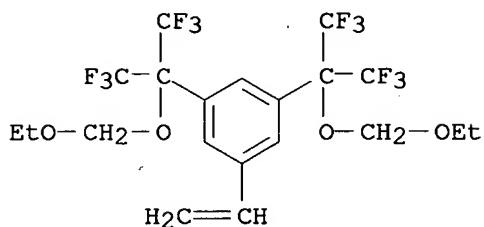
CM 2

CRN 731861-90-8  
CMF C19 H23 F3 O4



CM 3

CRN 585573-40-6  
CMF C20 H20 F12 O4



L34 ANSWER 11 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2004:292075 USPATFULL

TITLE: Vinyl addition polycyclic olefin polymers prepared with non-olefinic chain transfer agents and uses thereof

INVENTOR(S): Rhodes, Larry F., Silver Lake, OH, UNITED STATES  
Barnes, Dennis A., Medina, OH, UNITED STATES  
Bell, Andrew, Lakewood, OH, UNITED STATES  
Bennet, Brian K., Brecksville, OH, UNITED STATES  
Chang, Chun, Stow, OH, UNITED STATES  
Lipian, John-Henry, Medina, OH, UNITED STATES  
Wu, Xiaoming, Strongsville, OH, UNITED STATES

PATENT ASSIGNEE(S): Promerus LLC (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004229157	A1	20041118
APPLICATION INFO.:	US 2004-782547	A1	20040219 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-448939P	20030221 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	

LEGAL REPRESENTATIVE: Paul M. Reznick, WEBB ZIESENHEIM LOGSDON, ORKIN & HANSON, P.C., 436 Seventh Avenue, 700 Koppers Building, Pittsburgh, PA, 15219-1818

NUMBER OF CLAIMS: 75  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 8 Drawing Page(s)  
LINE COUNT: 2722  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 754231-22-6P

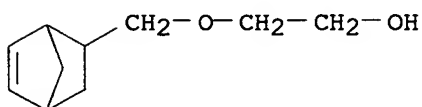
(vinyl addition polycyclic olefin polymers prepared with non-olefinic chain transfer agents and their uses in photoresist)

RN 754231-22-6 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-ethanol,  $\alpha,\alpha$ -bis(trifluoromethyl)-, polymer with 2-(bicyclo[2.2.1]hept-5-en-2-ylmethoxy)ethanol (9CI) (CA INDEX NAME)

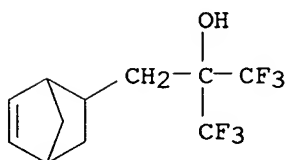
CM 1

CRN 754231-21-5  
CMF C10 H16 O2



CM 2

CRN 196314-61-1  
CMF C11 H12 F6 O



L34 ANSWER 12 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2004:178197 USPATFULL

TITLE: Photosensitive polymer including copolymer of alkyl vinyl ether and **resist** composition containing the same

INVENTOR(S): Choi, Sang-Jun, Seoul, KOREA, REPUBLIC OF  
Kim, Hyun-Woo, Seongnam-city, KOREA, REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004137363	A1	20040715
APPLICATION INFO.:	US 2003-704977	A1	20031112 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-764150, filed on 19 Jan 2001, GRANTED, Pat. No. US 6673513 Continuation-in-part of Ser. No. US 2000-576053, filed on 23 May 2000, GRANTED, Pat. No. US 6517990		

	NUMBER	DATE
PRIORITY INFORMATION:	KR 2000-2489	20000119
	KR 2000-20603	20000419
	US 2000-198761P	20000421 (60)

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: JONES VOLENTINE, L.L.C., Suite 150, 12200 Sunrise  
Valley Drive, Reston, VA, 20191

NUMBER OF CLAIMS: 48  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 2 Drawing Page(s)  
LINE COUNT: 1116  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 350992-45-9P

(chemical amplified photoresists containing alkyl vinyl ether polymers for ArF  
excimer laser exposure)

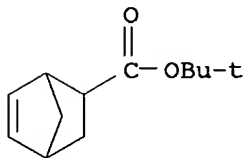
RN 350992-45-9 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylethyl ester,  
polymer with 3,4-dihydro-2H-pyran and 2,5-furandione (9CI) (CA INDEX  
NAME)

CM 1

CRN 154970-45-3

CMF C12 H18 O2



CM 2

CRN 110-87-2

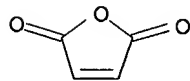
CMF C5 H8 O



CM 3

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 13 OF 86 USPATFULL on STN

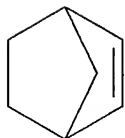
ACCESSION NUMBER: 2004:31015 USPATFULL

TITLE: **Photoresists**, polymers and processes for  
microlithography

INVENTOR(S): Feiring, Andrew Edward, Wilmington, DE, UNITED STATES  
Feldman, Jerald, Hockessin, DE, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004023152	A1	20040205
APPLICATION INFO.:	US 2003-437760	A1	20030514 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-806096, filed on 23 Mar 2001, GRANTED, Pat. No. US 6593058 A 371 of		

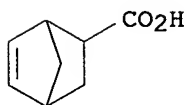
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101502P	19980923 (60)
	US 1999-120045P	19990212 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER, BARLEY MILL PLAZA 25/1128, 4417 LANCASTER PIKE, WILMINGTON, DE, 19805	
NUMBER OF CLAIMS:	26	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	1800	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		
IT	<b>262617-09-4P</b> , Norbornene-5-norbornene-2-carboxylic acid-tetrafluoroethylene copolymer (preparation and use in preparing UV photoresists for microlithog.)	
RN	262617-09-4 USPATFULL	
CN	Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, polymer with bicyclo[2.2.1]hept-2-ene and tetrafluoroethene (9CI) (CA INDEX NAME)	
CM	1	
CRN	498-66-8	
CMF	C7 H10	



CM 2

CRN 120-74-1

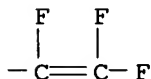
CMF C8 H10 O2



CM 3

CRN 116-14-3

CMF C2 F4



L34 ANSWER 14 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2004:7949 USPATFULL

TITLE: Polymeric compound and resin composition for  
**photoresist**

INVENTOR(S): Funaki, Yoshinori, Himeji-shi, JAPAN

## PATENT ASSIGNEE(S):

Tsutsumi, Kiyoharu, Himeji-shi, JAPAN  
Takaragi, Akira, Himeji-shi, JAPAN  
Daicel Chemical Industries, Ltd. (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004006189	A1	20040108
	US 6806335	B2	20041019
APPLICATION INFO.:	US 2003-375129	A1	20030228 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-937910, filed on 19 Oct 2001, GRANTED, Pat. No. US 6552143 A 371 of International Ser. No. WO 2001-JP515, filed on 26 Jan 2001, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-24527	20000201
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
LINE COUNT:	3064	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 353289-59-5P

(polymeric compound for photoresist and resin composition for photoresist)

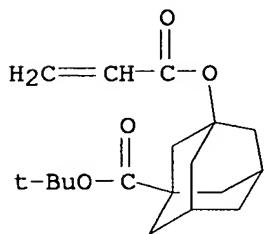
RN 353289-59-5 USPATFULL

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylic acid, 3-[(1-oxo-2-propenyl)oxy]-, 1,1-dimethylethyl ester, polymer with 2,5-furandione, 3-hydroxytricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl 2-propenoate and 3a,4,7,7a-tetrahydro-4,7-methanoisobenzofuran-1(3H)-one (9CI) (CA INDEX NAME)

CM 1

CRN 251563-20-9

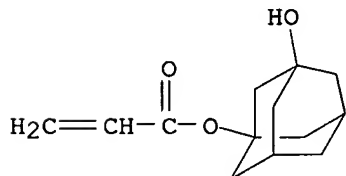
CMF C18 H26 O4



CM 2

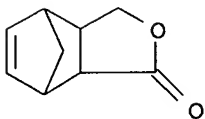
CRN 216581-76-9

CMF C13 H18 O3



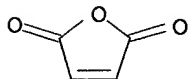
CM 3

CRN 85718-44-1  
CMF C9 H10 O2



CM 4

CRN 108-31-6  
CMF C4 H2 O3



L34 ANSWER 15 OF 86 USPATFULL on STN  
ACCESSION NUMBER: 2004:205768 USPATFULL  
TITLE: Copolymers and **photoresist** compositions  
comprising same  
INVENTOR(S): Barclay, George G., Jefferson, MA, United States  
Caporale, Stefan J., Worcester, MA, United States  
Yueh, Wang, Shrewsbury, MA, United States  
Mao, Zhibiao, Shrewsbury, MA, United States  
Mattia, Joseph, Framingham, MA, United States  
PATENT ASSIGNEE(S): Shipley Company, L.L.C., Marlborough, MA, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6777157	B1	20040817
APPLICATION INFO.:	US 2000-567814		20000509 (9)

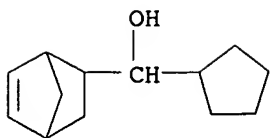
	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-185345P	20000226 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Ashton, Rosemary	
LEGAL REPRESENTATIVE:	Corless, Peter F., Frickey, Darryl P., Edwards & Angell, LLP	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)	
LINE COUNT:	929	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **355395-09-4P**  
(photoresist composition containing photoacid labile acrylate and cyclic olefin)  
RN 355395-09-4 USPATFULL  
CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester,  
polymer with bicyclo[2.2.1]hept-2-ene,  $\alpha$ -  
cyclopentylbicyclo[2.2.1]hept-2-ene-2-methanol and 2,5-furandione (9CI)  
(CA INDEX NAME)

CM 1

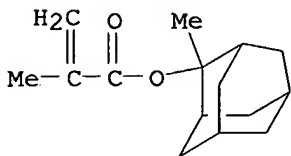
CRN 355395-08-3  
CMF C13 H20 O



CM 2

CRN 177080-67-0

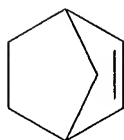
CMF C15 H22 O2



CM 3

CRN 498-66-8

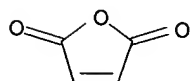
CMF C7 H10



CM 4

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 16 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 11

ACCESSION NUMBER: 2003:42890 HCAPLUS

DOCUMENT NUMBER: 138:115058

TITLE: **Resist** composition and patterning process

INVENTOR(S): Kobayashi, Tomohiro; Nishi, Tsunehiro; Watanabe, Satoshi; Kinsho, Takeshi; Nagura, Shigehiro; Ishihara, Toshinobu

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., USA

SOURCE: U.S. Pat. Appl. Publ., 35 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003013039	A1	20030116	US 2002-170345	20020614

US 6830866 B2 20041214  
 JP 2003066612 A2 20030305 JP 2002-168143 20020610  
 TW 548518 B 20030821 TW 2002-91113198 20020614  
 PRIORITY APPLN. INFO.: JP 2001-181079 A 20010615

IT **485818-88-0P**

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(**photoresist** composition and patterning process containing)

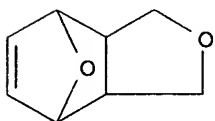
RN 485818-88-0 HCAPLUS

CN 1,4:5,8-Dimethanonaphthalene-2-carboxylic acid, 1,2,3,4,4a,5,8,8a-octahydro-, 1-ethylcyclopentyl ester, polymer with 1,3,3a,4,7,7a-hexahydro-4,7-epoxyisobenzofuran (9CI) (CA INDEX NAME)

CM 1

CRN 479075-40-6

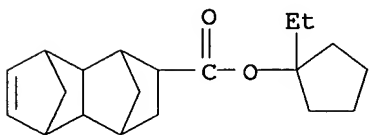
CMF C8 H10 O2



CM 2

CRN 279243-82-2

CMF C20 H28 O2



L34 ANSWER 17 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 12

ACCESSION NUMBER: 2003:907516 HCAPLUS

DOCUMENT NUMBER: 139:388490

TITLE: Chemically amplified positive **resists** producing defect-free patterns with square profile

INVENTOR(S): Fujimori, Toru

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 60 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003330195	A2	20031119	JP 2002-279433	20020925
PRIORITY APPLN. INFO.:			JP 2002-60445	A 20020306
OTHER SOURCE(S):	MARPAT 139:388490			

IT **398141-14-5P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(chemical amplified pos. **photoresists** containing Meldrum's acid derivs. and producing patterns with square profile)

RN 398141-14-5 HCAPLUS

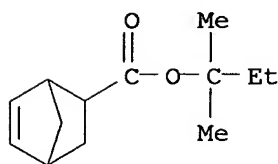
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)



CM 1

CRN 398140-58-4

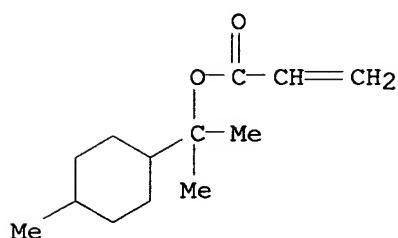
CMF C13 H20 O2



CM 2

CRN 342648-11-7

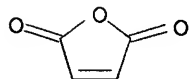
CMF C13 H22 O2



CM 3

CRN 108-31-6

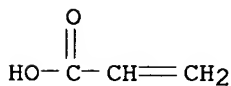
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



L34 ANSWER 18 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 13  
ACCESSION NUMBER: 2003:735196 HCAPLUS  
DOCUMENT NUMBER: 139:267983  
TITLE: Positive-working **photoresist** composition  
containing polymer with fluoro-aliphatic group  
INVENTOR(S): Fujimori, Toru  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 88 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003262952	A2	20030919	JP 2002-65444	20020311
PRIORITY APPLN. INFO.:			JP 2002-65444	20020311

IT **398141-14-5P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(pos. **photoresist** composition containing polymer with fluoro-aliphatic group)

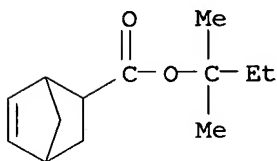
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

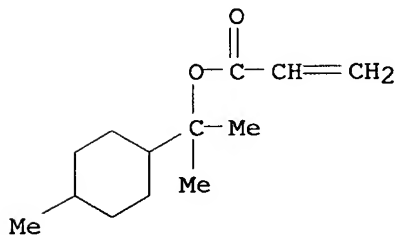
CMF C13 H20 O2



CM 2

CRN 342648-11-7

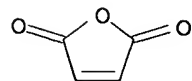
CMF C13 H22 O2



CM 3

CRN 108-31-6

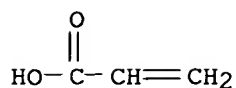
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



L34 ANSWER 19 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 14

ACCESSION NUMBER: 2003:432993 HCAPLUS

DOCUMENT NUMBER: 139:28625

TITLE: Positive **photoresist** compositions with suppressed edge roughness

INVENTOR(S): Fujimori, Toru; Kawamura, Koichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 89 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003162061	A2	20030606	JP 2002-219789	20020729
PRIORITY APPLN. INFO.:			JP 2001-279708	A 20010914
OTHER SOURCE(S):	MARPAT 139:28625			

IT **398141-14-5P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(pos. **photoresists** containing sulfonimides with suppressed edge roughness)

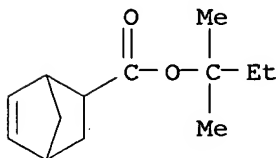
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

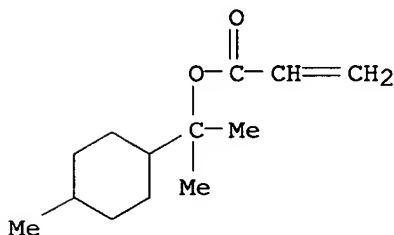
CMF C13 H20 O2



CM 2

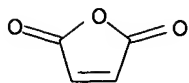
CRN 342648-11-7

CMF C13 H22 O2



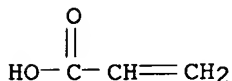
CM 3

CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 79-10-7  
CMF C3 H4 O2



L34 ANSWER 20 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 15  
ACCESSION NUMBER: 2003:412090 HCAPLUS  
DOCUMENT NUMBER: 139:14956  
TITLE: Far-UV-sensitive positive **photoresists**  
forming fine patterns through half-tone phase-shift masks  
INVENTOR(S): Fujimori, Toru  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 91 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003156848	A2	20030530	JP 2001-357766	20011122
PRIORITY APPLN. INFO.:			JP 2001-357766	20011122

IT **398141-14-5**

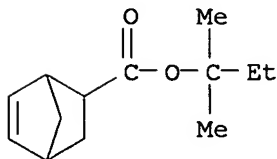
RL: TEM (Technical or engineered material use); USES (Uses)  
(far-UV amplified pos. **photoresists** containing F-containing N compds.  
and suppressing side lobe phenomena in lithog. using half-tone masks)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

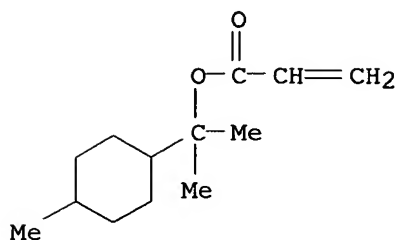
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CRN 398140-58-4  
CMF C13 H20 O2



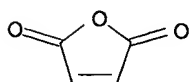
CM 2

CRN 342648-11-7  
CMF C13 H22 O2



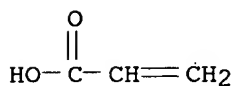
CM 3

CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 79-10-7  
CMF C3 H4 O2



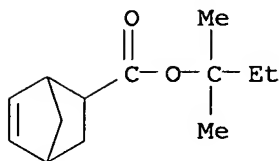
L34 ANSWER 21 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 16  
ACCESSION NUMBER: 2003:412089 HCAPLUS  
DOCUMENT NUMBER: 139:14955  
TITLE: Chemically amplified far-UV-sensitive positive  
**resists** producing defect-free patterns  
INVENTOR(S): Fujimori, Toru  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 93 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003156845	A2	20030530	JP 2001-353163	20011119

PRIORITY APPLN. INFO.: JP 2001-353163 20011119  
IT **398141-14-5**  
RL: TEM (Technical or engineered material use); USES (Uses)  
(chemical amplified far-UV pos. **resists** containing polymers having  
alicyclic groups in main and/or side chains and sp. F compds.)  
RN 398141-14-5 HCAPLUS  
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

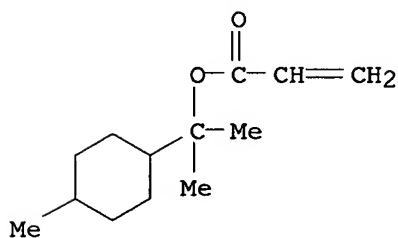
CM 1

CRN 398140-58-4  
CMF C13 H20 O2



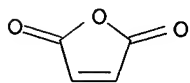
CM 2

CRN 342648-11-7  
CMF C13 H22 O2



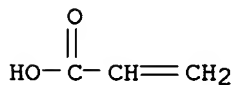
CM 3

CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 79-10-7  
CMF C3 H4 O2



L34 ANSWER 22 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 17  
ACCESSION NUMBER: 2003:317556 HCAPLUS  
DOCUMENT NUMBER: 138:346480  
TITLE: Positive chemically amplified **resist**  
compositions having improved edge roughness of  
patterns and high sensitivity  
INVENTOR(S): Fujimori, Toru  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 96 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003122010	A2	20030425	JP 2001-318242	20011016
PRIORITY APPLN. INFO.:			JP 2001-318242	20011016

IT 398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses)  
(pos. chemical amplified **resist** compns. containing cycloolefin  
polymers and having improved edge roughness of patterns and high  
sensitivity)

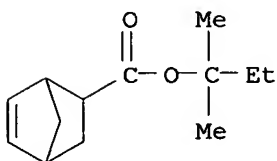
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

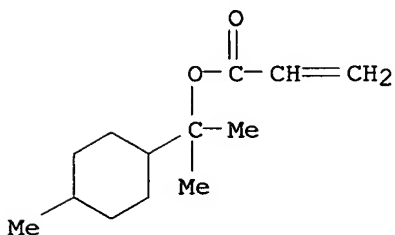
CMF C13 H20 O2



CM 2

CRN 342648-11-7

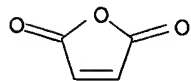
CMF C13 H22 O2



CM 3

CRN 108-31-6

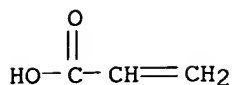
CMF C4 H2 O3



CM 4

CRN 79-10-7

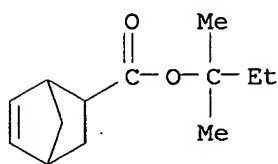
CMF C3 H4 O2



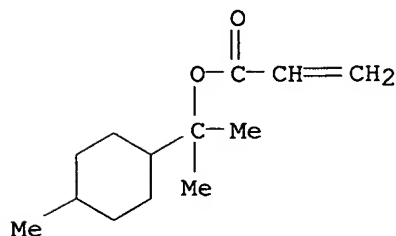
L34 ANSWER 23 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 18  
 ACCESSION NUMBER: 2003:754897 HCAPLUS  
 DOCUMENT NUMBER: 139:252537  
 TITLE: Positive **resist** composition  
 INVENTOR(S): Fujimori, Toru  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 89 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1347335	A1	20030924	EP 2003-6122	20030318
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2003270791	A2	20030925	JP 2002-74565	20020318
US 2003224287	A1	20031204	US 2003-388408	20030317
PRIORITY APPLN. INFO.:			JP 2002-74565	A 20020318

IT **398141-14-5P**  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (pos. **photoresist** composition containing)  
 RN 398141-14-5 HCAPLUS  
 CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 398140-58-4  
 CMF C13 H20 O2



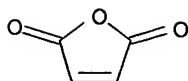
CM 2  
 CRN 342648-11-7  
 CMF C13 H22 O2





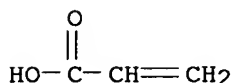
CM 3

CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 79-10-7  
CMF C3 H4 O2



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 24 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 19

ACCESSION NUMBER: 2003:241052 HCAPLUS  
DOCUMENT NUMBER: 138:262693  
TITLE: Positive **photoresist** composition  
INVENTOR(S): Fujimori, Toru; Kawabe, Yasumasa  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Eur. Pat. Appl., 101 pp.  
CODEN: EPXXDW

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1296190	A1	20030326	EP 2002-21204	20020918
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2003167333	A2	20030613	JP 2002-563	20020107
US 2003134225	A1	20030717	US 2002-244070	20020916
PRIORITY APPLN. INFO.:			JP 2001-285180	A 20010919
			JP 2002-563	A 20020107

IT **398141-14-5P**

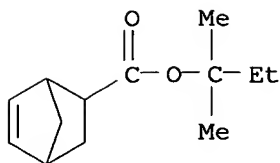
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(pos. **photoresist** composition containing)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

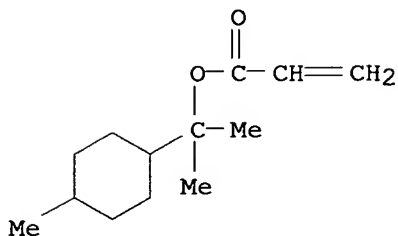
CRN 398140-58-4  
CMF C13 H20 O2



CM 2

CRN 342648-11-7

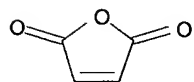
CMF C13 H22 O2



CM 3

CRN 108-31-6

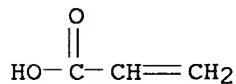
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 25 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 20

ACCESSION NUMBER: 2003:20986 HCAPLUS

DOCUMENT NUMBER: 138:98194

TITLE: Positive photosensitive composition

INVENTOR(S): Fujimori, Toru

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 135 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 1273970	A2	20030108	EP 2002-14889	20020705
EP 1273970	A3	20040128		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2003021905	A2	20030124	JP 2001-206637	20010706
JP 2003098672	A2	20030404	JP 2001-287112	20010920
US 2003186161	A1	20031002	US 2002-188224	20020703
JP 2003084441	A2	20030319	JP 2002-196113	20020704
TW 586052	B	20040501	TW 2002-91114923	20020705
PRIORITY APPLN. INFO.:			JP 2001-204969	A 20010705
			JP 2001-206637	A 20010706
			JP 2001-287112	A 20010920

IT **398141-14-5P**

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pos. photosensitive composition containing)

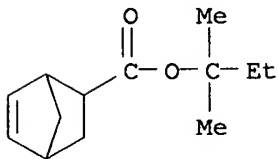
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

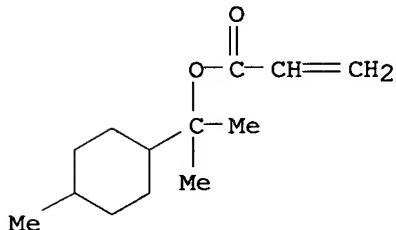
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CM 2

CRN 342648-11-7

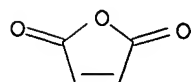
CMF C13 H22 O2



CM 3

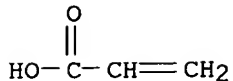
CRN 108-31-6

CMF C4 H2 O3



CM 4

CRN 79-10-7



L34 ANSWER 26 OF 86 USPATFULL on STN  
 ACCESSION NUMBER: 2003:318544 USPATFULL  
 TITLE: Positive **resist** composition  
 INVENTOR(S): Fujimori, Toru, Shizuoka, JAPAN  
 PATENT ASSIGNEE(S): FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003224287	A1	20031204
APPLICATION INFO.:	US 2003-388408	A1	20030317 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2002-74565	20020318
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W., WASHINGTON, DC, 20037	
NUMBER OF CLAIMS:	8	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2427	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **398141-14-5P**

(pos. photoresist composition containing)

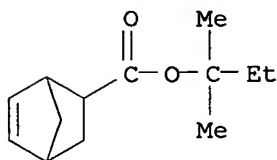
RN 398141-14-5 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
 polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

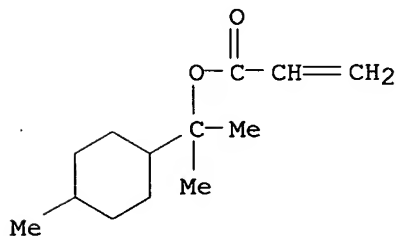
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CM 2

CRN 342648-11-7

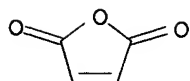
CMF C13 H22 O2



CM 3

CRN 108-31-6

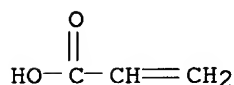
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



L34 ANSWER 27 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2003:306309 USPATFULL

TITLE: Novel copolymers and **photoresist** compositions comprising same

INVENTOR(S): Barclay, George G., Jefferson, MA, UNITED STATES  
Caporale, Stefan J., Worcester, MA, UNITED STATES  
Yueh, Wang, Shrewsbury, MA, UNITED STATES  
Mao, Zhibiao, Shrewsbury, MA, UNITED STATES  
Mattia, Joseph, Framingham, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003215742	A1	20031120
	US 6849381	B2	20050201
APPLICATION INFO.:	US 2003-408522	A1	20030407 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-567814, filed on 9 May 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-185345P	20000226 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	EDWARDS & ANGELL, LLP, P.O. BOX 9169, BOSTON, MA, 02209	
NUMBER OF CLAIMS:	41	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1057	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 355395-09-4P

(photoresist composition containing photoacid labile acrylate and cyclic olefin)

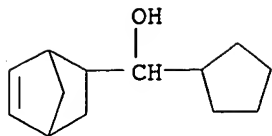
RN 355395-09-4 USPATFULL

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester, polymer with bicyclo[2.2.1]hept-2-ene,  $\alpha$ -cyclopentylbicyclo[2.2.1]hept-2-ene-2-methanol and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

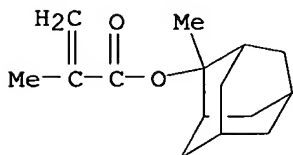
CRN 355395-08-3

CMF C13 H20 O



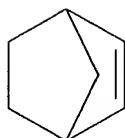
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CRN 177080-67-0  
CMF C15 H22 O2



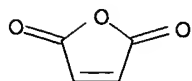
CM 3

CRN 498-66-8  
CMF C7 H10



CM 4

CRN 108-31-6  
CMF C4 H2 O3



L34 ANSWER 28 OF 86 USPATFULL on STN  
ACCESSION NUMBER: 2003:265146 USPATFULL  
TITLE: Positive photosensitive composition  
INVENTOR(S): Fujimori, Toru, Shizuoka, JAPAN  
PATENT ASSIGNEE(S): FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003186161	A1	20031002
APPLICATION INFO.:	US 2002-188224	A1	20020703 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2001-204969	20010705
	JP 2001-206637	20010706
	JP 2001-287112	20010920

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W.,

WASHINGTON, DC, 20037

NUMBER OF CLAIMS: 16  
EXEMPLARY CLAIM: 1  
LINE COUNT: 3188

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 398141-14-5P

(pos. photosensitive composition containing)

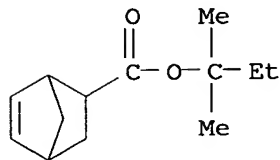
RN 398141-14-5 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

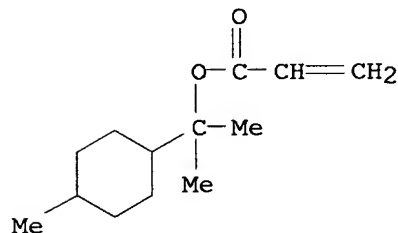
CMF C13 H20 O2



CM 2

CRN 342648-11-7

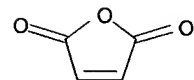
CMF C13 H22 O2



CM 3

CRN 108-31-6

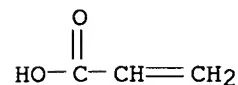
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



L34 ANSWER 29 OF 86 USPATFULL on STN  
 ACCESSION NUMBER: 2003:194414 USPATFULL  
 TITLE: Positive **resist** composition  
 INVENTOR(S): Fujimori, Toru, Shizuoka, JAPAN  
 Kawabe, Yasumasa, Shizuoka, JAPAN  
 PATENT ASSIGNEE(S): FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003134225	A1	20030717
APPLICATION INFO.:	US 2002-244070	A1	20020916 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2001-285180	20010919
	JP 2002-563	20020107
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W., WASHINGTON, DC, 20037	
NUMBER OF CLAIMS:	13	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2741	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **398141-14-5P**

(pos. photoresist composition containing)

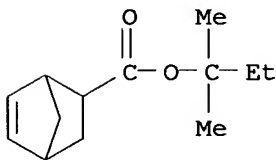
RN 398141-14-5 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
 polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

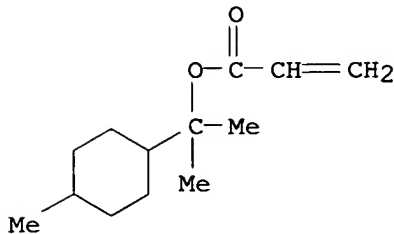
CMF C13 H20 O2



CM 2

CRN 342648-11-7

CMF C13 H22 O2

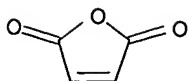


CM 3

CRN 108-31-6

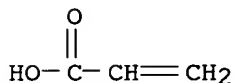
CMF C4 H2 O3





CM 4

CRN 79-10-7  
CMF C3 H4 O2



L34 ANSWER 30 OF 86 USPATFULL on STN  
ACCESSION NUMBER: 2003:127900 USPATFULL  
TITLE: Novel ester compounds, polymers, **resist**  
compositions and patterning process  
INVENTOR(S): Nishi, Tsunehiro, Niigata-ken, JAPAN  
Hasegawa, Koji, Niigata-ken, JAPAN  
Watanabe, Takeru, Niigata-ken, JAPAN  
Kinsho, Takeshi, Niigata-ken, JAPAN  
Nakashima, Mutsuo, Niigata-ken, JAPAN  
Tachibana, Seiichiro, Niigata-ken, JAPAN  
Hatakeyama, Jun, Niigata-ken, JAPAN  
PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S.  
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003088115	A1	20030508
	US 6670498	B2	20031230
APPLICATION INFO.:	US 2002-288514	A1	20021106 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2001-842007, filed on 26 Apr 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-127532	20000427
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON BLVD., SUITE 1400, ARLINGTON, VA, 22201	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	1531	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

IT 370089-04-6P

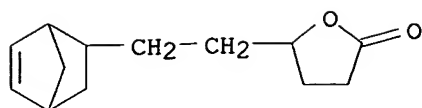
(preparation of ester compound and polymers for photoresist compns. and patterning process)

RN 370089-04-6 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 3-[(1-ethylcyclopentyl)oxy]-1-methyl-3-oxopropyl ester, polymer with 5-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)dihydro-2(3H)-furanone (9CI) (CA INDEX NAME)

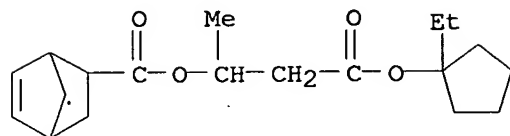
CM 1

CRN 370089-03-5  
CMF C13 H18 O2



CM 2

CRN 370088-90-7  
CMF C19 H28 O4



L34 ANSWER 31 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2003:112808 USPATFULL

TITLE: Positive photosensitive composition

INVENTOR(S): Kodama, Kunihiro, Shizuoka, JAPAN

Sato, Kenichiro, Shizuoka, JAPAN

Fujimori, Toru, Shizuoka, JAPAN

PATENT ASSIGNEE(S): FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003077540	A1	20030424
APPLICATION INFO.:	US 2002-150967	A1	20020521 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2001-152587	20010522
	JP 2001-155897	20010524
	JP 2001-159060	20010528

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SUGHRUE MION, PLLC, 2100 PENNSYLVANIA AVENUE, N.W., WASHINGTON, DC, 20037

NUMBER OF CLAIMS: 14

EXEMPLARY CLAIM: 1

LINE COUNT: 2952

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 398141-14-5P

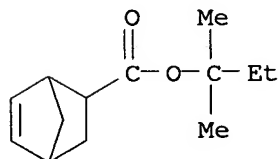
(resin; pos photoresist composition containing)

RN 398141-14-5 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

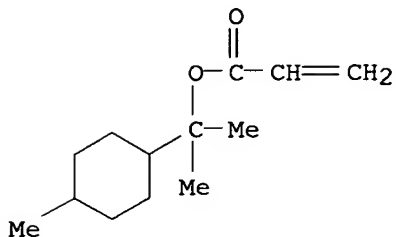
CRN 398140-58-4  
CMF C13 H20 O2



CM 2

CRN 342648-11-7

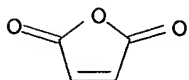
CMF C13 H22 O2



CM 3

CRN 108-31-6

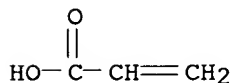
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



L34 ANSWER 32 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2003:51645 USPATFULL

TITLE: Novel epoxy compound having alicyclic structure, polymer, **resist** composition and patterning process

INVENTOR(S): Hasegawa, Koji, Niigata-ken, JAPAN  
Kinsho, Takeshi, Niigata-ken, JAPAN  
Watanabe, Takeru, Niigata-ken, JAPAN  
Nishi, Tsunehiro, Niigata-ken, JAPAN

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003036603	A1	20030220
APPLICATION INFO.:	US 2002-167393	A1	20020613 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2001-179593	20010614
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON BLVD., SUITE 1400, ARLINGTON, VA, 22201	
NUMBER OF CLAIMS:	5	

EXEMPLARY CLAIM: 1  
LINE COUNT: 2134  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
IT 478946-03-1P

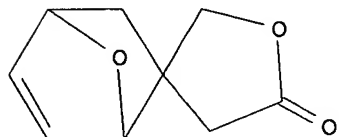
(oxanorbornene spiro derivative (polymers) for use in chemical amplified  
resists for photolithog. patterning)

RN 478946-03-1 USPATFULL

CN 1,4:5,8-Dimethanonaphthalene-2-carboxylic acid, 1,2,3,4,4a,5,8,8a-  
octahydro-, 1-ethylcyclopentyl ester, polymer with spiro[furan-3(2H),2'-  
[7]oxabicyclo[2.2.1]hept[5]en]-5(4H)-one (9CI) (CA INDEX NAME)

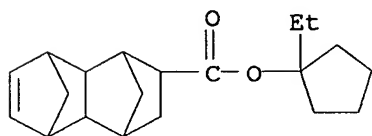
CM 1

CRN 478945-85-6  
CMF C9 H10 O3



CM 2

CRN 279243-82-2  
CMF C20 H28 O2



L34 ANSWER 33 OF 86 USPATFULL on STN  
ACCESSION NUMBER: 2003:24309 USPATFULL  
TITLE: Modified polycyclic polymers  
INVENTOR(S): Jayaraman, Saikumar, Twinsburg, OH, UNITED STATES  
Benedikt, George Martin, Solon, OH, UNITED STATES  
Rhodes, Larry Funderburk, Silver Lake, OH, UNITED STATES  
Vicari, Richard, Strongsville, OH, UNITED STATES  
Allen, Robert David, San Jose, CA, UNITED STATES  
DiPetro, Richard Anthony, San Jose, CA, UNITED STATES  
Sooriyakumaran, Ratnam, San Jose, CA, UNITED STATES  
Wallow, Thomas, Union City, CA, UNITED STATES  
PATENT ASSIGNEE(S): The B.F.Goodrich Company (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003018153	A1	20030123
	US 6794459	B2	20040921
APPLICATION INFO.:	US 2002-224994	A1	20020821 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-253499, filed on 19 Feb 1999, GRANTED, Pat. No. US 6451945		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-75558P	19980223 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Nestor W. Shust, Hudak & Shunk Co., L.P.A., Suite 808, 7 West Bowery St., Akron, OH, 44308-1133	

NUMBER OF CLAIMS: 16  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 6 Drawing Page(s)  
LINE COUNT: 2100

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 239137-09-8DP, hydrolyzed  
(modified polymers having polycyclic side chains for photoresists with improved hydrophilicity)

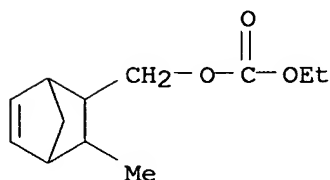
RN 239137-09-8 USPATFULL

CN 1,4:5,8-Dimethanonaphthalene-2-carboxylic acid, 1,2,3,4,4a,5,8,8a-octahydro-, ethyl ester, polymer with 1,1-dimethylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate, ethyl (3-methylbicyclo[2.2.1]hept-5-en-2-yl)methyl carbonate and trimethylsilyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 239137-00-9

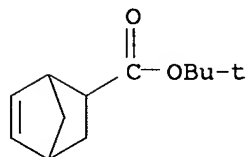
CMF C12 H18 O3



CM 2

CRN 154970-45-3

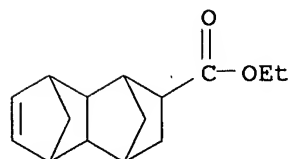
CMF C12 H18 O2



CM 3

CRN 61615-20-1

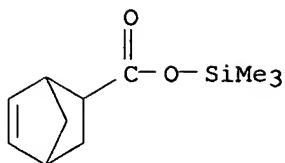
CMF C15 H20 O2



CM 4

CRN 56151-01-0

CMF C11 H18 O2 Si



L34 ANSWER 34 OF 86 USPATFULL on STN  
 ACCESSION NUMBER: 2003:190643 USPATFULL  
 TITLE: **Photoresists**, polymers and processes for microlithography  
 INVENTOR(S): Feiring, Andrew Edward, Wilmington, DE, United States  
 Feldman, Jerald, Hockessin, DE, United States  
 PATENT ASSIGNEE(S): E. I. du Pont de Nemours and Company, Wilmington, DE, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6593058	B1	20030715
	WO 2000017712		20000330
APPLICATION INFO.:	US 2001-806096		20010323 (9)
	WO 1999-US21912		19990921

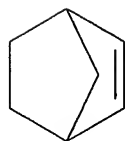
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101502P	19980923 (60)
	US 1999-120045P	19990212 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Ashton, Rosemary	
ASSISTANT EXAMINER:	Lee, Sin J.	
NUMBER OF CLAIMS:	31	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	1799	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **262617-09-4P**, Norbornene-5-norbornene-2-carboxylic acid-tetrafluoroethylene copolymer  
 (preparation and use in preparing UV photoresists for microlithog.)  
 RN 262617-09-4 USPATFULL  
 CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, polymer with bicyclo[2.2.1]hept-2-ene and tetrafluoroethene (9CI) (CA INDEX NAME)

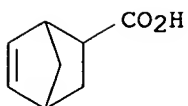
CM 1

CRN 498-66-8  
 CMF C7 H10



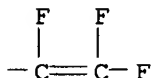
CM 2

CRN 120-74-1  
 CMF C8 H10 O2



CM 3

CRN 116-14-3  
CMF C2 F4



L34 ANSWER 35 OF 86 USPATFULL on STN  
ACCESSION NUMBER: 2003:40517 USPATFULL  
TITLE: Photosensitive polymer including copolymer of alkyl vinyl ether and **resist** composition containing the same  
INVENTOR(S): Choi, Sang-jun, Seoul, KOREA, REPUBLIC OF  
Kim, Hyun-woo, Seongnam, KOREA, REPUBLIC OF  
PATENT ASSIGNEE(S): Samsung Electronics Co., Ltd., Suwon, KOREA, REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6517990	B1	20030211
APPLICATION INFO.:	US 2000-576053		20000523 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	KR 2000-2489	20000119
	KR 2000-20603	20000419
	US 2000-198761P	20000421 (60)

DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Ashton, Rosemary  
LEGAL REPRESENTATIVE: Volentine Francos, PLLC  
NUMBER OF CLAIMS: 40  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)  
LINE COUNT: 1049

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 350992-45-9P

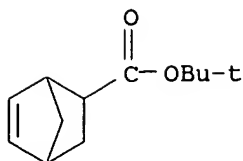
(chemical amplified photoresists containing alkyl vinyl ether polymers for ArF excimer laser exposure)

RN 350992-45-9 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylethyl ester, polymer with 3,4-dihydro-2H-pyran and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

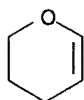
CRN 154970-45-3  
CMF C12 H18 O2



CM 2

CRN 110-87-2

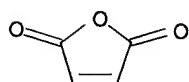
CMF C5 H8 O



CM 3

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 36 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 21  
 ACCESSION NUMBER: 2003:570079 HCAPLUS  
 DOCUMENT NUMBER: 140:383006  
 TITLE: Nonshrinkable **photoresists** for ArF lithography  
 AUTHOR(S): Kim, Jin-Baek; Oh, Tae Hwan; Choi, Jae-Hak; Lee, Jae-Jun  
 CORPORATE SOURCE: Department of Chemistry, School of Molecular Science(BK21) and Center for Advanced Functional Polymers, Korea Advanced Institute of Science and Technology, Daejeon, 305-701, S. Korea  
 SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (2003), 5039(Pt. 2, Advances in Resist Technology and Processing XX), 689-697  
 CODEN: PSISDG; ISSN: 0277-786X  
 PUBLISHER: SPIE-The International Society for Optical Engineering  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 IT **683786-03-0P**  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (nonshrinkable chemical amplified **photoresists** for ArF lithog.  
 based on copolymers containing dimethyloxepanone acid labile group)  
 RN 683786-03-0 HCAPLUS  
 CN 2H-Cyclopenta[b]naphth[2,1-d]oxepin-8-butanoic acid, 2-  
 [(bicyclo[2.2.1]hept-5-en-2-ylcarbonyl)oxy]hexadecahydro- $\gamma$ ,4a,7a-trimethyl-6-oxo-, methyl ester, ( $\gamma$ R,2R,4aS,4bS,8R,10aS,10bR,12aR)-, polymer with 2,5-furandione (9CI) (CA INDEX NAME)

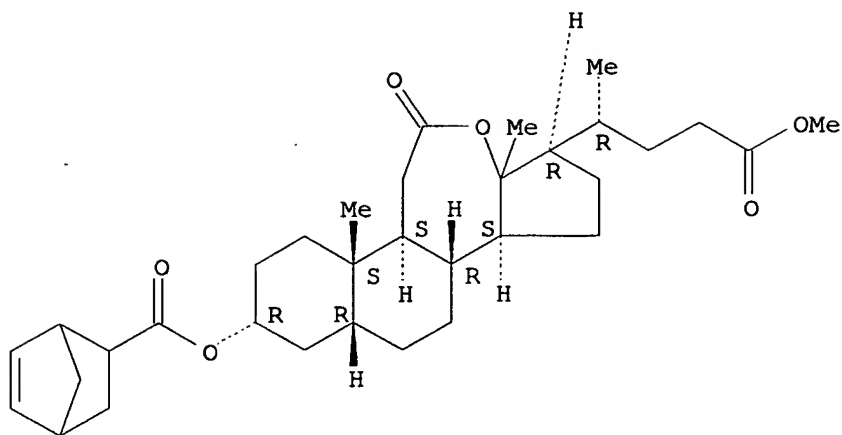
CM 1

CRN 683786-01-8

CMF C33 H48 O6



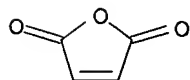
Absolute stereochemistry.



CM 2

CRN 108-31-6

CMF C4 H2 O3



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 37 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 22

ACCESSION NUMBER: 2002:522667 HCAPLUS

DOCUMENT NUMBER: 137:79393

TITLE: Polymers of polycyclic compounds, **resist** composition and patterning process

INVENTOR(S): Tachibana, Seiichiro; Nakashima, Mutsuo; Nishi, Tsunehiro; Kinsho, Takeshi; Hasegawa, Koji; Watanabe, Takeru; Hatakeyama, Jun

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 38 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002091215	A1	20020711	US 2001-986274	20011108
US 6660448	B2	20031209		
JP 2002206012	A2	20020726	JP 2001-331910	20011030
TW 536665	B	20030611	TW 2001-90127928	20011109
PRIORITY APPLN. INFO.:			JP 2000-343324	A 20001110

IT **441071-34-7P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polymers of polycyclic compds., **resist** composition and patterning process)

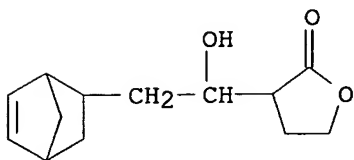
RN 441071-34-7 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 2-ethylbicyclo[2.2.1]hept-2-yl ester, polymer with 3-(2-bicyclo[2.2.1]hept-5-en-2-yl-1-hydroxyethyl) dihydro-2(3H)-furanone and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 398488-21-6

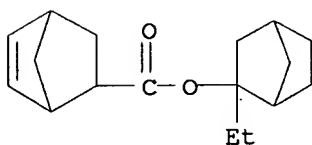
CMF C13 H18 O3



CM 2

CRN 330596-01-5

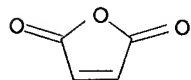
CMF C17 H24 O2



CM 3

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 38 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 23

ACCESSION NUMBER: 2002:72739 HCAPLUS

DOCUMENT NUMBER: 136:142610

TITLE: Positive photoresist composition

INVENTOR(S): Sato, Kenichiro; Aoai, Toshiaki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 49 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002009666	A1	20020124	US 2001-834639	20010416
US 6808860	B2	20041026		
JP 2001296661	A2	20011026	JP 2000-115497	20000417
JP 2002031890	A2	20020131	JP 2000-215574	20000717
JP 3444844	B2	20030908		
JP 2002040662	A2	20020206	JP 2000-231670	20000731
PRIORITY APPLN. INFO.:			JP 2000-115497	A 20000417
			JP 2000-215574	A 20000717
			JP 2000-231670	A 20000731

IT 392310-13-3P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material)

use); PREP (Preparation); USES (Uses)

(acid-decomposable resin; pos. **photoresist** composition containing)

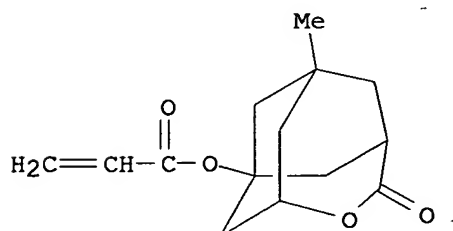
RN 392310-13-3 HCAPLUS

CN 2-Propenoic acid, 1-cyclohexyl-1-methylethyl ester, polymer with  
1-cyclohexyl-1H-pyrrole-2,5-dione,  $\alpha,\alpha$ -  
dimethylbicyclo[2.2.1]hept-5-ene-2-methanol and 8-methyl-5-oxo-4-  
oxatricyclo[4.3.1.1<sup>3,8</sup>]undec-1-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 392310-12-2

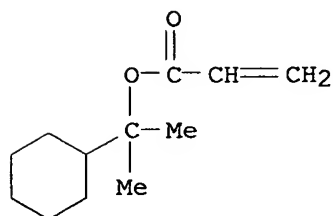
CMF C14 H18 O4



CM 2

CRN 383196-79-0

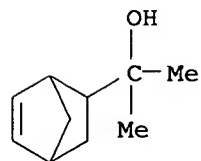
CMF C12 H20 O2



CM 3

CRN 22497-08-1

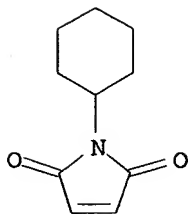
CMF C10 H16 O



CM 4

CRN 1631-25-0

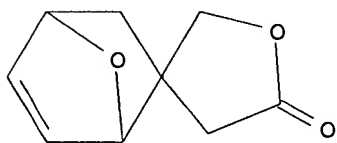
CMF C10 H13 N O2



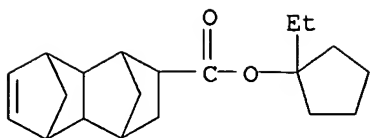
L34 ANSWER 39 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 24  
 ACCESSION NUMBER: 2002:975674 HCAPLUS  
 DOCUMENT NUMBER: 138:63818  
 TITLE: Novel oxanorbornene spiro derivatives and their  
 polymers for use as **resists** for  
 photolithographic patterning  
 INVENTOR(S): Hasegawa, Koji; Kaneo, Takeshi; Watanabe, Takeshi;  
 Nishi, Tsunehiro  
 PATENT ASSIGNEE(S): Shin-Etsu Chemical Industry Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002371080	A2	20021226	JP 2001-179593	20010614
US 2003036603	A1	20030220	US 2002-167393	20020613
			JP 2001-179593	A 20010614

PRIORITY APPLN. INFO.:  
 OTHER SOURCE(S): MARPAT 138:63818  
 IT **478946-03-1P**  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (oxanorbornene spiro derivative (polymers) for use in chemical amplified  
**resists** for photolithog. patterning)  
 RN 478946-03-1 HCAPLUS  
 CN 1,4:5,8-Dimethanonaphthalene-2-carboxylic acid, 1,2,3,4,4a,5,8,8a-  
 octahydro-, 1-ethylcyclopentyl ester, polymer with spiro[furan-3(2H),2'-  
 [7]oxabicyclo[2.2.1]hept[5]en]-5(4H)-one (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 478945-85-6  
 CMF C9 H10 O3



CM 2  
 CRN 279243-82-2  
 CMF C20 H28 O2



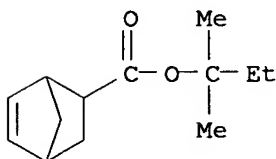
L34 ANSWER 40 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 25  
 ACCESSION NUMBER: 2002:904532 HCAPLUS  
 DOCUMENT NUMBER: 137:391087  
 TITLE: Positive-working **photoresist** compositions  
 containing specific resin and specific acid-generator  
 INVENTOR(S): Sato, Kenichiro; Kodama, Kunihiro  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 105 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002341539	A2	20021127	JP 2001-149620	20010518
US 2003008241	A1	20030109	US 2002-93411	20020311
US 6777160	B2	20040817		
TW 538317	B	20030621	TW 2002-91104604	20020312
PRIORITY APPLN. INFO.:			JP 2001-68849	A 20010312
			JP 2001-68850	A 20010312
			JP 2001-149620	A 20010518

IT **398141-14-5P**  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (resin; pos.-working **photoresist** compns.)  
 RN 398141-14-5 HCAPLUS  
 CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

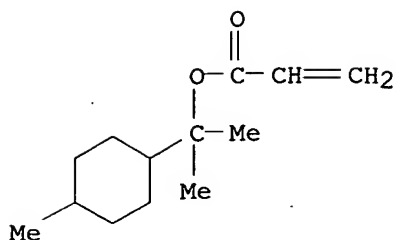
CM 1

CRN 398140-58-4  
 CMF C13 H20 O2



CM 2

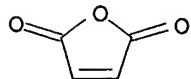
CRN 342648-11-7  
 CMF C13 H22 O2



CM 3

CRN 108-31-6

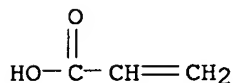
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



L34 ANSWER 41 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 26  
 ACCESSION NUMBER: 2002:848227 HCAPLUS  
 DOCUMENT NUMBER: 137:360309  
 TITLE: Radiation-sensitive positive **resist**  
 compositions showing wide defocus latitude and less  
 particle generation on storage  
 INVENTOR(S): Kodama, Kunihiro; Sato, Kenichiro  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 90 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002323767	A2	20021108	JP 2001-157366	20010525
US 2003017415	A1	20030123	US 2002-79414	20020222
US 6858370	B2	20050222		
TW 548523	B	20030821	TW 2002-91103178	20020222
PRIORITY APPLN. INFO.:			JP 2001-48602	A 20010223
			JP 2001-48783	A 20010223
			JP 2001-48784	A 20010223
			JP 2001-48880	A 20010223
			JP 2001-157366	A 20010525
			JP 2001-157367	A 20010525

IT 398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses)  
 (radiation-sensitive pos. **resist** compns. showing wide defocus  
 latitude and less particle generation on storage)

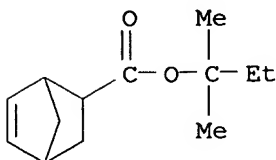
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

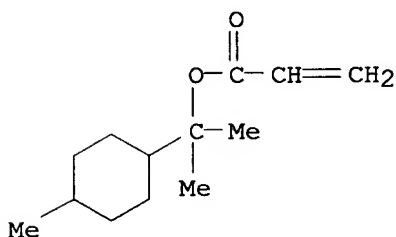
CMF C13 H20 O2



CM 2

CRN 342648-11-7

CMF C13 H22 O2



CM 3

CRN 108-31-6

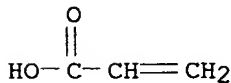
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



L34 ANSWER 42 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 27

ACCESSION NUMBER: 2002:848220 HCAPLUS

DOCUMENT NUMBER: 137:360306

TITLE: Radiation-sensitive positively working photosensitive composition

INVENTOR(S): Kodama, Kunihiko; Sato, Kenichiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 92 pp.

DOCUMENT TYPE:  
LANGUAGE:  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

CODEN: JKXXAF  
Patent  
Japanese

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002323758	A2	20021108	JP 2001-157367	20010525
US 2003017415	A1	20030123	US 2002-79414	20020222
US 6858370	B2	20050222		

PRIORITY APPLN. INFO.:

JP 2001-48783	A	20010223
JP 2001-48602	A	20010223
JP 2001-48784	A	20010223
JP 2001-48880	A	20010223
JP 2001-157366	A	20010525
JP 2001-157367	A	20010525

IT **398141-14-5P 405509-24-2P 474510-67-3P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(radiation-sensitive pos. working photosensitive composition for high resolution and storage stability)

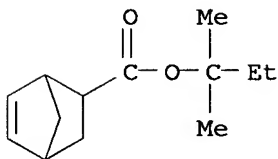
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

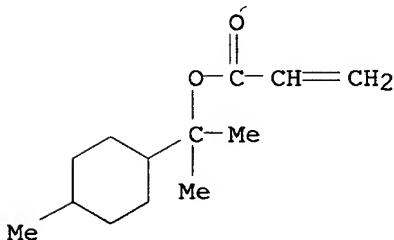
CMF C13 H20 O2



CM 2

CRN 342648-11-7

CMF C13 H22 O2

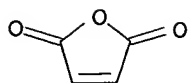


CM 3

CRN 108-31-6

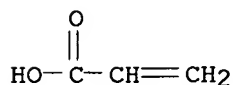
CMF C4 H2 O3





CM 4

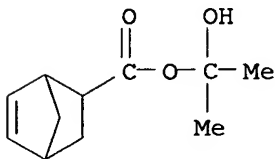
CRN 79-10-7  
CMF C3 H4 O2



RN 405509-24-2 HCAPLUS  
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1-hydroxy-1-methylethyl ester, polymer with 2,5-furandione, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate and tetrahydro-5-oxo-3-furanyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

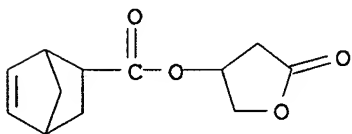
CM 1

CRN 405509-23-1  
CMF C11 H16 O3



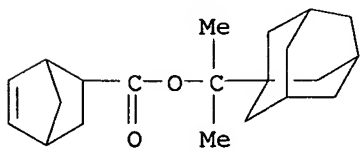
CM 2

CRN 398140-70-0  
CMF C12 H14 O4



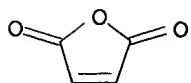
CM 3

CRN 328087-76-9  
CMF C21 H30 O2



CM 4

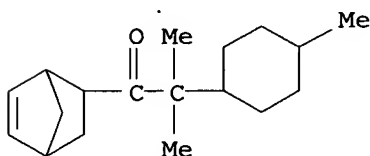
CRN 108-31-6  
CMF C4 H2 O3



RN 474510-67-3 HCAPLUS  
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 3-hydroxytricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl ester, polymer with 1-bicyclo[2.2.1]hept-5-en-2-yl-2-methyl-2-(4-methylcyclohexyl)-1-propanone, 5-ethoxy-3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indene and 2,5-furandione (9CI) (CA INDEX NAME)

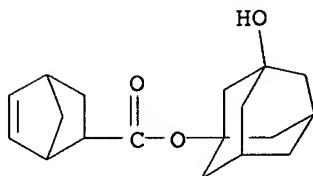
CM 1

CRN 474510-66-2  
CMF C18 H28 O



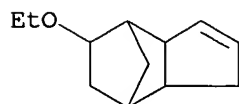
CM 2

CRN 331866-92-3  
CMF C18 H24 O3



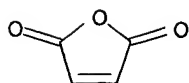
CM 3

CRN 53018-26-1  
CMF C12 H18 O



CM 4

CRN 108-31-6  
CMF C4 H2 O3



L34 ANSWER 43 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 28

ACCESSION NUMBER: 2002:792710 HCAPLUS

DOCUMENT NUMBER: 137:317922

TITLE: Positive **photoresist** compositions offering sharp patterns

INVENTOR(S): Sato, Kenichiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 85 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002303984	A2	20021018	JP 2001-135245	20010502
PRIORITY APPLN. INFO.:			JP 2001-22010	A 20010130
OTHER SOURCE(S):	MARPAT 137:317922			

IT **398141-14-5P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(pos. **photoresist** compns. offering sharp patterns)

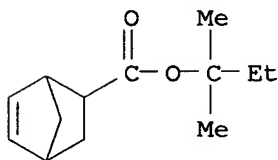
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

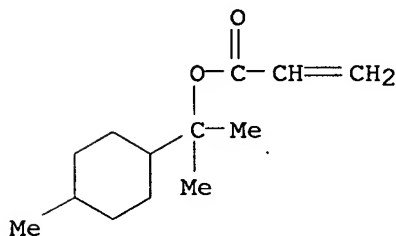
CMF C13 H20 O2



CM 2

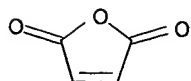
CRN 342648-11-7

CMF C13 H22 O2



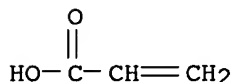
CM 3

CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 79-10-7  
CMF C3 H4 O2



L34 ANSWER 44 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 29

ACCESSION NUMBER: 2002:673047 HCAPLUS

DOCUMENT NUMBER: 137:224108

TITLE: Storage-stable excimer laser-sensitive  
positive-working photosensitive compositions with  
reduced pattern variation on defocusing

INVENTOR(S): Kodama, Kunihiko; Sato, Kenichiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 86 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002251012	A2	20020906	JP 2001-48784	20010223
US 2003017415	A1	20030123	US 2002-79414	20020222
US 6858370	B2	20050222		
TW 548523	B	20030821	TW 2002-91103178	20020222
PRIORITY APPLN. INFO.:			JP 2001-48602	A 20010223
			JP 2001-48783	A 20010223
			JP 2001-48784	A 20010223
			JP 2001-48880	A 20010223
			JP 2001-157366	A 20010525
			JP 2001-157367	A 20010525

IT 398141-14-5P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(chemical amplified storage-stable excimer laser-sensitive pos.

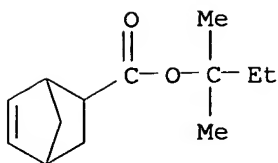
photoresists with reduced pattern variation on defocusing)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

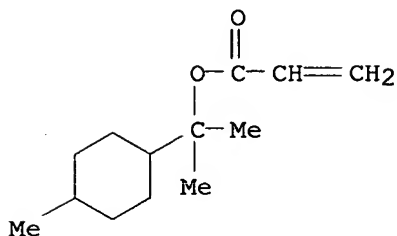
CRN 398140-58-4  
CMF C13 H20 O2



CM 2

CRN 342648-11-7

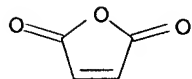
CMF C13 H22 O2



CM 3

CRN 108-31-6

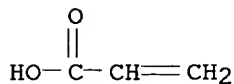
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



L34 ANSWER 45 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 30  
 ACCESSION NUMBER: 2002:673045 HCAPLUS  
 DOCUMENT NUMBER: 137:224107  
 TITLE: Chemically amplified positive-working far-UV  
**photoresist** compositions suitable for halftone  
 phase-shift masks  
 INVENTOR(S): Sato, Kenichiro; Uenishi, Kazuya  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 104 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

JP 2002251011 A2 20020906 JP 2001-48782 20010223  
 PRIORITY APPLN. INFO.: JP 2001-48782 20010223  
 OTHER SOURCE(S): MARPAT 137:224107

IT 398141-14-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (chemical amplified pos.-working far-UV **photoresists** suitable for halftone phase-shift masks)

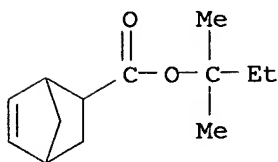
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

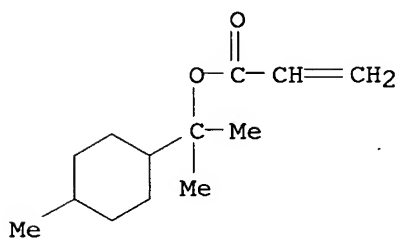
CMF C13 H20 O2



CM 2

CRN 342648-11-7

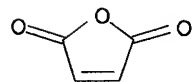
CMF C13 H22 O2



CM 3

CRN 108-31-6

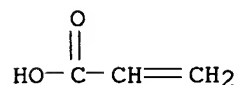
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



ACCESSION NUMBER: 2002:592336 HCAPLUS  
 DOCUMENT NUMBER: 137:147763  
 TITLE: Chemically amplified positive-working  
**photoresist** composition providing fine  
 resolution patterns  
 INVENTOR(S): Fujimori, Toru  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 94 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002221796	A2	20020809	JP 2001-18868	20010126
PRIORITY APPLN. INFO.:			JP 2001-18868	20010126
OTHER SOURCE(S):	MARPAT 137:147763			

IT **398141-14-5**

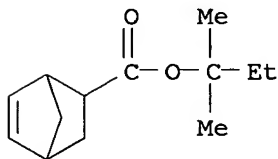
RL: TEM (Technical or engineered material use); USES (Uses)  
 (in chemical amplified pos.-working **photoresist** composition for  
 far-UV exposure)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
 polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

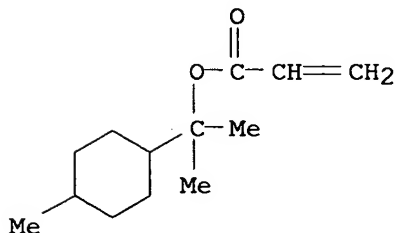
CM 1

CRN 398140-58-4  
 CMF C13 H20 O2



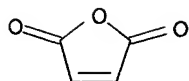
CM 2

CRN 342648-11-7  
 CMF C13 H22 O2



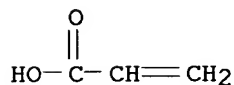
CM 3

CRN 108-31-6  
 CMF C4 H2 O3



CM 4

CRN 79-10-7  
CMF C3 H4 O2



L34 ANSWER 47 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 32

ACCESSION NUMBER: 2002:566567 HCAPLUS  
DOCUMENT NUMBER: 137:132103  
TITLE: Positive-working **photoresist** composition  
INVENTOR(S): Fujimori, Toru  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 93 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

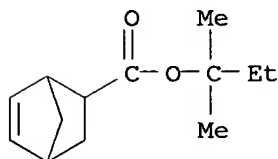
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002214787	A2	20020731	JP 2001-13298	20010122
PRIORITY APPLN. INFO.:			JP 2001-13298	20010122

IT **398141-14-5P**  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(resin in pos.-working **photoresist** composition)

RN 398141-14-5 HCAPLUS  
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

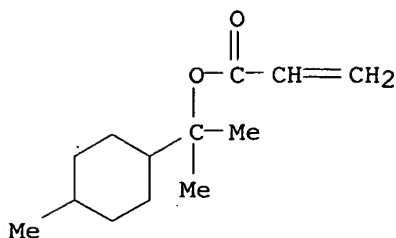
CRN 398140-58-4  
CMF C13 H20 O2



CM 2

CRN 342648-11-7  
CMF C13 H22 O2

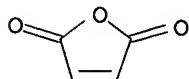




CM 3

CRN 108-31-6

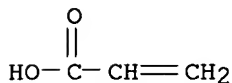
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



L34 ANSWER 48 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 33

ACCESSION NUMBER: 2002:566566 HCAPLUS

DOCUMENT NUMBER: 137:132102

TITLE: Positive-working **photoresist** composition

INVENTOR(S): Fujimori, Toru

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 78 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002214786	A2	20020731	JP 2001-10481	20010118
PRIORITY APPLN. INFO.:			JP 2001-10481	20010118

IT **398141-14-5P**

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(resin in pos.-working **photoresist** composition)

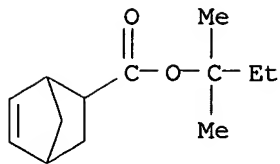
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

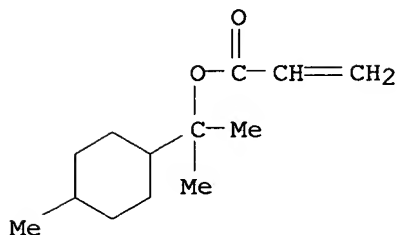
CMF C13 H20 O2



CM 2

CRN 342648-11-7

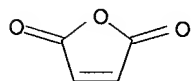
CMF C13 H22 O2



CM 3

CRN 108-31-6

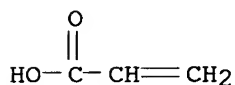
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



L34 ANSWER 49 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 34

ACCESSION NUMBER: 2002:538441 HCAPLUS

DOCUMENT NUMBER: 137:116950

TITLE: Chemically amplified far-UV positive  
**photoresists** compositions with improved  
exposure margin and defocus latitude

INVENTOR(S): Sato, Kenichiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002202607	A2	20020719	JP 2000-402246	20001228

OTHER SOURCE(S):

MARPAT 137:116950

IT 398141-14-5

RL: TEM (Technical or engineered material use); USES (Uses)  
(far-UV pos. **photoresists** having sulfonium and iodonium  
photoacid generators with improved exposure margin and defocus  
latitude)

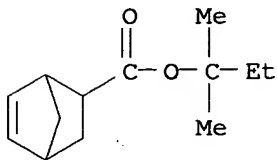
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

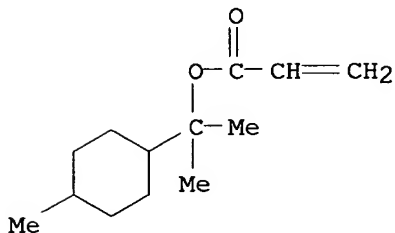
CMF C13 H20 O2



CM 2

CRN 342648-11-7

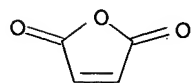
CMF C13 H22 O2



CM 3

CRN 108-31-6

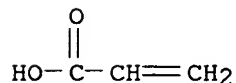
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



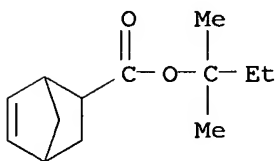
L34 ANSWER 50 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 35  
 ACCESSION NUMBER: 2002:538440 HCAPLUS  
 DOCUMENT NUMBER: 137:116949  
 TITLE: Storage-stable chemically amplified far-UV positive  
**photoresists** compositions with good  
 sensitivity and no aggregation  
 INVENTOR(S): Sato, Kenichiro  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002202606	A2	20020719	JP 2000-402245	20001228
PRIORITY APPLN. INFO.:			JP 2000-402245	20001228

IT **398141-14-5**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (storage-stable far-UV pos. **photoresist** compns. in solvents  
 with good solubility)  
 RN 398141-14-5 HCAPLUS  
 CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
 polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

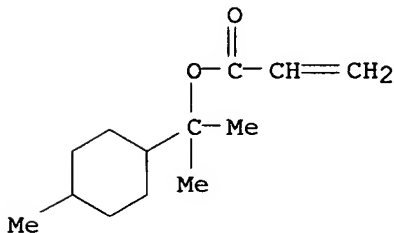
CM 1

CRN 398140-58-4  
 CMF C13 H20 O2



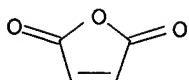
CM 2

CRN 342648-11-7  
 CMF C13 H22 O2



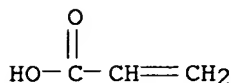
CM 3

CRN 108-31-6  
 CMF C4 H2 O3



CM 4

CRN 79-10-7  
CMF C3 H4 O2



L34 ANSWER 51 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 36  
 ACCESSION NUMBER: 2002:539335 HCAPLUS  
 DOCUMENT NUMBER: 137:101423  
 TITLE: Storage-stable chemically amplified far-UV positive  
**photoresist** compositions suitable for  
 half-tone phase-shift photomasks  
 INVENTOR(S): Sato, Kenichiro  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 80 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

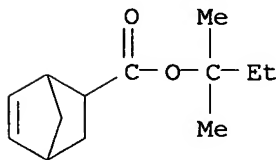
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002202605	A2	20020719	JP 2000-402244	20001228
PRIORITY APPLN. INFO.:			JP 2000-402244	20001228
OTHER SOURCE(S):	MARPAT 137:101423			
IT <b>398141-14-5</b>				

RL: TEM (Technical or engineered material use); USES (Uses)  
 (storage-stable far-UV pos. **photoresists** containing  
 triphenylsulfonium photoacid generators for half-tone phase-shift  
 photomasks)

RN 398141-14-5 HCAPLUS  
 CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
 polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

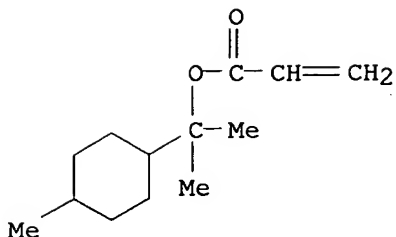
CM 1

CRN 398140-58-4  
CMF C13 H20 O2



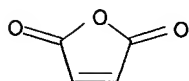
CM 2

CRN 342648-11-7  
CMF C13 H22 O2



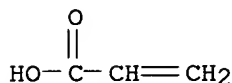
CM 3

CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 79-10-7  
CMF C3 H4 O2



L34 ANSWER 52 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 37  
ACCESSION NUMBER: 2002:237124 HCAPLUS  
DOCUMENT NUMBER: 136:286589  
TITLE: Positive-working chemically amplified  
**photoresist** composition containing specific  
acid-sensitive resin and specific nitrogen-containing  
compound for semiconductor device fabrication  
INVENTOR(S): Fujimori, Toru; Kawabe, Yasumasa; Nakao, Hajime  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 92 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

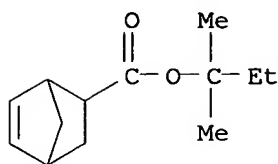
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002090987	A2	20020327	JP 2001-209543	20010710
US 2002155383	A1	20021024	US 2001-902793	20010712
US 6692897	B2	20040217		

PRIORITY APPLN. INFO.: JP 2000-211642 A 20000712  
OTHER SOURCE(S): MARPAT 136:286589  
IT **398141-14-5P 405509-24-2P**  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(resin in pos.-working **photoresist** composition)  
RN 398141-14-5 HCAPLUS  
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

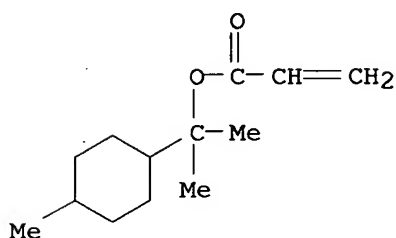
CMF C13 H20 O2



CM 2

CRN 342648-11-7

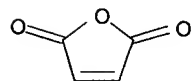
CMF C13 H22 O2



CM 3

CRN 108-31-6

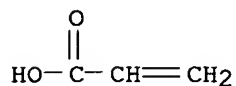
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



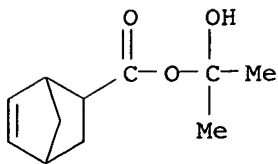
RN 405509-24-2 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1-hydroxy-1-methylethyl ester, polymer with 2,5-furandione, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate and tetrahydro-5-oxo-3-furanyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

CM 1

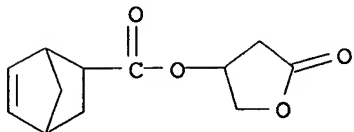
CRN 405509-23-1

CMF C11 H16 O3



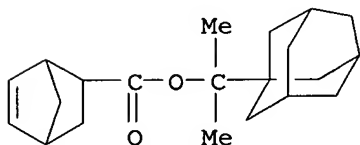
CM 2

CRN 398140-70-0  
CMF C12 H14 O4



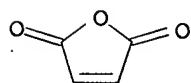
CM 3

CRN 328087-76-9  
CMF C21 H30 O2



CM 4

CRN 108-31-6  
CMF C4 H2 O3



L34 ANSWER 53 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 38

ACCESSION NUMBER: 2002:904448 HCAPLUS  
DOCUMENT NUMBER: 138:9656  
TITLE: Positive photosensitive composition  
INVENTOR(S): Kodama, Kunihiro; Sato, Kenichiro; Fujimori, Toru  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Eur. Pat. Appl., 145 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1260864	A1	20021127	EP 2002-11516	20020522
EP 1260864	B1	20040818		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR



JP 2002351077	A2	20021204	JP 2001-152587	20010522
JP 2002351079	A2	20021204	JP 2001-155897	20010524
JP 2002351063	A2	20021204	JP 2001-159060	20010528
US 2003077540	A1	20030424	US 2002-150967	20020521
PRIORITY APPLN. INFO.:			JP 2001-152587	A 20010522
			JP 2001-155897	A 20010524
			JP 2001-159060	A 20010528

OTHER SOURCE(S): MARPAT 138:9656

IT **398141-14-5P**

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(resin; pos **photoresist** composition containing)

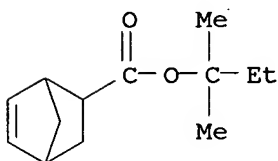
RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

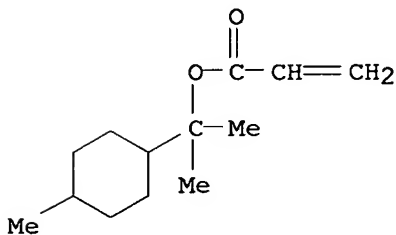
CMF C13 H20 O2



CM 2

CRN 342648-11-7

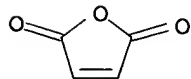
CMF C13 H22 O2



CM 3

CRN 108-31-6

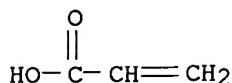
CMF C4 H2 O3



CM 4

CRN 79-10-7

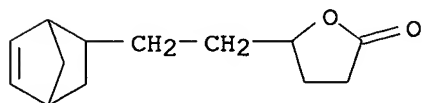
CMF C3 H4 O2



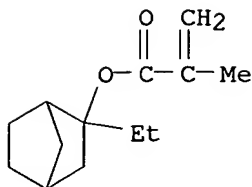
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 54 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 39  
 ACCESSION NUMBER: 2002:272837 HCAPLUS  
 DOCUMENT NUMBER: 136:310309  
 TITLE: Polymers with cyclopentane rings in or adjacent to the chains, **resist** composition and patterning process  
 INVENTOR(S): Nishi, Tsunehiro; Nakashima, Mutsuo; Hasegawa, Koji; Tachibana, Seiichiro; Kinsho, Takeshi; Watanabe, Takeru; Hatakeyama, Jun  
 PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 47 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1195390	A1	20020410	EP 2001-307791	20010913
EP 1195390	B1	20041208		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002161116	A2	20020604	JP 2001-269745	20010906
TW 557304	B	20031011	TW 2001-90122771	20010913
US 2002061463	A1	20020523	US 2001-951523	20010914
US 6673515	B2	20040106		
PRIORITY APPLN. INFO.:			JP 2000-279164	A 20000914
IT <b>409093-65-8P</b> RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polymers with cyclopentane rings in or adjacent to the chains for <b>resists</b> patternable by UV or electron beams)				
RN 409093-65-8 HCAPLUS				
CN 2-Propenoic acid, 2-methyl-, 2-ethylbicyclo[2.2.1]hept-2-yl ester, polymer with 5-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)dihydro-2(3H)-furanone and 2,5-furandione (9CI) (CA INDEX NAME)				
CM 1				
CRN 370089-03-5				
CMF C13 H18 O2				

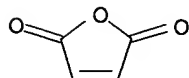


CM 2  
 CRN 330595-98-7  
 CMF C13 H20 O2



CM 3

CRN 108-31-6  
CMF C4 H2 O3



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 55 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 40

ACCESSION NUMBER: 2002:119352 HCAPLUS

DOCUMENT NUMBER: 136:175472

TITLE: Positive photosensitive composition for photofabrication using deep UV ray

INVENTOR(S): Kodama, Kunihiko; Aoi, Toshiaki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 120 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1179750	A1	20020213	EP 2001-117796	20010802
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002122994	A2	20020426	JP 2001-188670	20010621
US 2002051933	A1	20020502	US 2001-921691	20010806
US 6492091	B2	20021210		

PRIORITY APPLN. INFO.: JP 2000-240059 A 20000808

IT 398141-14-5P

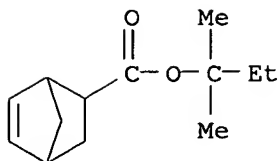
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(resin; deep UV photofabrication pos. **photoresist** composition containing)

RN 398141-14-5 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester, polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

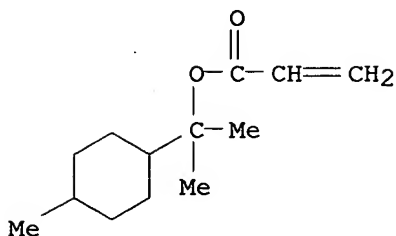
CRN 398140-58-4  
CMF C13 H20 O2



CM 2

CRN 342648-11-7

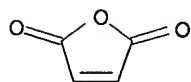
CMF C13 H22 O2



CM 3

CRN 108-31-6

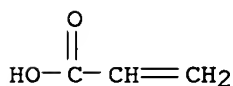
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 56 OF 86 USPATFULL on STN  
 ACCESSION NUMBER: 2002:301718 USPATFULL  
 TITLE: Polymeric compound and resin composition for  
**photoresist**  
 INVENTOR(S): Funaki, Yoshinori, Himeji-shi, JAPAN  
 Tsutsumi, Kiyoharu, Himeji-shi, JAPAN  
 Takaragi, Akira, Himeji-shi, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002169266	A1	20021114
	US 6552143	B2	20030422
APPLICATION INFO.:	US 2001-937910	A1	20011019 (9)
	WO 2001-JP515		20010126

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-24527	20000201
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1	
LINE COUNT:	3139	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 353289-59-5P

(polymeric compound for photoresist and resin composition for photoresist)

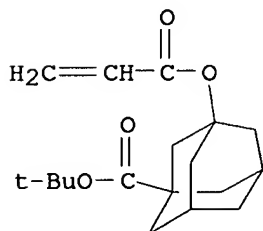
RN 353289-59-5 USPTAFULL

CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylic acid, 3-[(1-oxo-2-propenyl)oxy]-, 1,1-dimethylethyl ester, polymer with 2,5-furandione, 3-hydroxytricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl 2-propenoate and 3a,4,7,7a-tetrahydro-4,7-methanoisobenzofuran-1(3H)-one (9CI) (CA INDEX NAME)

CM 1

CRN 251563-20-9

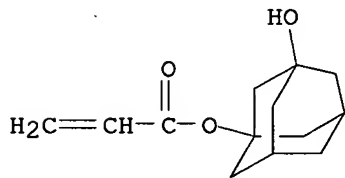
CMF C18 H26 O4



CM 2

CRN 216581-76-9

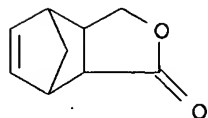
CMF C13 H18 O3



CM 3

CRN 85718-44-1

CMF C9 H10 O2



CM 4

CRN 108-31-6



L34 ANSWER 57 OF 86 USPATFULL on STN  
 ACCESSION NUMBER: 2002:279949 USPATFULL  
 TITLE: Positive **resist** composition  
 INVENTOR(S): Fujimori, Toru, Shizuoka, JAPAN  
 Kawabe, Yasumasa, Shizuoka, JAPAN  
 Nakao, Hajime, Shizuoka, JAPAN  
 PATENT ASSIGNEE(S): FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002155383	A1	20021024
	US 6692897	B2	20040217
APPLICATION INFO.:	US 2001-902793	A1	20010712 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-211642	20000712
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SUGHRUE, MION, ZINN,, MACPEAK & SEAS, PLLC, 2100 Pennsylvania Avenue, NW, Washington, DC, 20037-3213	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2009	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **398141-14-5P 405509-24-2P**

(resin in pos.-working photoresist composition)

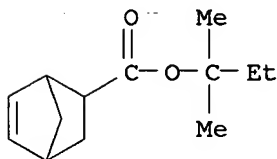
RN 398141-14-5 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
 polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 398140-58-4

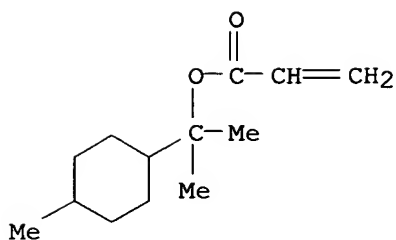
CMF C13 H20 O2



CM 2

CRN 342648-11-7

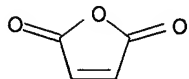
CMF C13 H22 O2



CM 3

CRN 108-31-6

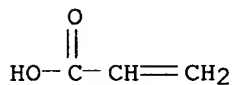
CMF C4 H2 O3



CM 4

CRN 79-10-7

CMF C3 H4 O2



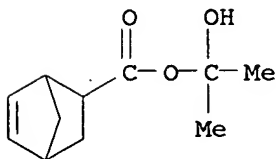
RN 405509-24-2 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1-hydroxy-1-methylethyl ester, polymer with 2,5-furandione, 1-methyl-1-tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate and tetrahydro-5-oxo-3-furanyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 405509-23-1

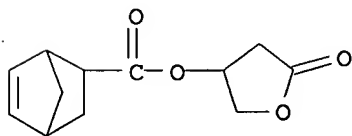
CMF C11 H16 O3



CM 2

CRN 398140-70-0

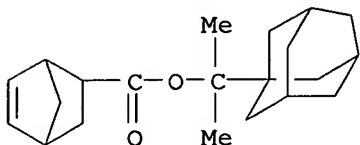
CMF C12 H14 O4



CM 3

CRN 328087-76-9

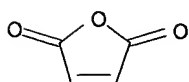
CMF C21 H30 O2



CM 4

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 58 OF 86 USPTAFULL on STN

ACCESSION NUMBER: 2002:172456 USPTAFULL

TITLE: Novel **photoresist** monomer having hydroxy group and carboxy group, copolymer thereof and **photoresist** composition using the same

INVENTOR(S): Lee, Geun Su, Ichon-shi, KOREA, REPUBLIC OF  
Koh, Cha Won, Ichon-shi, KOREA, REPUBLIC OF  
Jung, Jae Chang, Ichon-shi, KOREA, REPUBLIC OF  
Jung, Min Ho, Ichon-shi, KOREA, REPUBLIC OF  
Baik, Ki Ho, Ichon-shi, KOREA, REPUBLIC OF

PATENT ASSIGNEE(S): Hyundai Electronics Industries Co., Ltd., Ichon-shi, KOREA, REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002091216	A1	20020711
	US 6586619	B2	20030701
APPLICATION INFO.:	US 2002-79753	A1	20020219 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-383861, filed on 26 Aug 1999, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1998-34694	19980826
	KR 1998-39079	19980921
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834	
NUMBER OF CLAIMS:	40	
EXEMPLARY CLAIM:	1	
LINE COUNT:	979	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 260065-43-8P

(preparation of photoresist copolymer using new photoresist-monomer for photoresist composition with submicron resolution)

RN 260065-43-8 USPTAFULL

CN 7-Oxabicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono(5-hydroxypentyl) ester, polymer with bicyclo[2.2.1]hept-2-ene, 1,1-dimethylethyl hydrogen bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate and 2,5-furandione (9CI) (CA

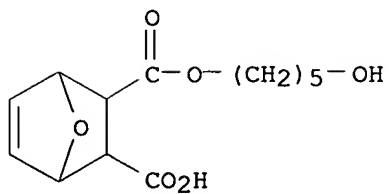


INDEX NAME)

CM 1

CRN 260065-28-9

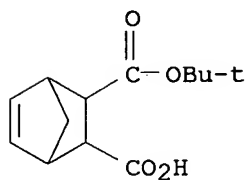
CMF C13 H18 O6



CM 2

CRN 76198-01-1

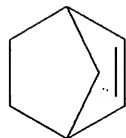
CMF C13 H18 O4



CM 3

CRN 498-66-8

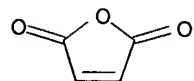
CMF C7 H10



CM 4

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 59 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2002:119480 USPATFULL

TITLE: Polymer, **resist** composition and patterning process

INVENTOR(S): Nishi, Tsunehiro, Nakakubiki-gun, JAPAN  
 Nakashima, Mutsuo, Nakakubiki-gun, JAPAN  
 Tachibana, Seiichiro, Nakakubiki-gun, JAPAN  
 Kinsho, Takeshi, Nakakubiki-gun, JAPAN  
 Hasegawa, Koji, Nakakubiki-gun, JAPAN

PATENT ASSIGNEE(S):

Watanabe, Takeru, Nakakubiki-gun, JAPAN  
Hatakeyama, Jun, Nakakubiki-gun, JAPAN  
Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S.  
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002061463	A1	20020523
	US 6673515	B2	20040106
APPLICATION INFO.:	US 2001-951523	A1	20010914 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-279164	20000914
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON BLVD., SUITE 1400, ARLINGTON, VA, 22201	
NUMBER OF CLAIMS:	7	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1766	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		
IT 409093-65-8P		

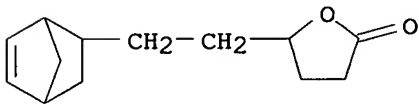
(polymers with cyclopentane rings in or adjacent to the chains for  
resists patternable by UV or electron beams)

RN 409093-65-8 USPATFULL

CN 2-Propenoic acid, 2-methyl-, 2-ethylbicyclo[2.2.1]hept-2-yl ester, polymer  
with 5-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)dihydro-2(3H)-furanone and  
2,5-furandione (9CI) (CA INDEX NAME)

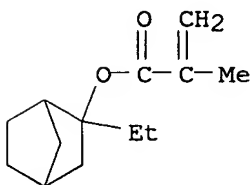
CM 1

CRN 370089-03-5  
CMF C13 H18 O2



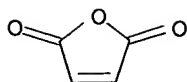
CM 2

CRN 330595-98-7  
CMF C13 H20 O2



CM 3

CRN 108-31-6  
CMF C4 H2 O3



L34 ANSWER 60 OF 86 USPATFULL on STN  
 ACCESSION NUMBER: 2002:99037 USPATFULL  
 TITLE: Positive photosensitive composition  
 INVENTOR(S): Kodama, Kunihiro, Shizuoka, JAPAN  
 Aoai, Toshiaki, Shizuoka, JAPAN  
 PATENT ASSIGNEE(S): FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002051933	A1	20020502
	US 6492091	B2	20021210
APPLICATION INFO.:	US 2001-921691	A1	20010806 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-240059	20000808
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC, 2100 Pennsylvania Avenue, N.W., Washington, DC, 20037	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2260	

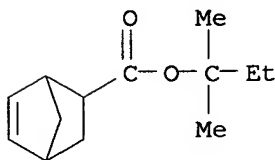
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **398141-14-5P**  
 (resin; deep UV photofabrication pos. photoresist composition containing)

RN 398141-14-5 USPATFULL  
 CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylpropyl ester,  
 polymer with 2,5-furandione, 1-methyl-1-(4-methylcyclohexyl)ethyl  
 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

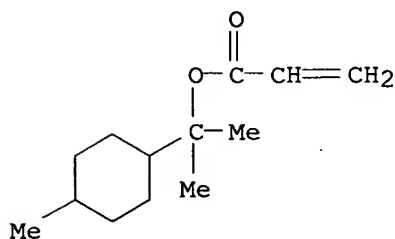
CM 1

CRN 398140-58-4  
 CMF C13 H20 O2



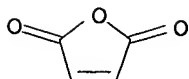
CM 2

CRN 342648-11-7  
 CMF C13 H22 O2



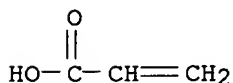
CM 3

CRN 108-31-6  
CMF C4 H2 O3



CM 4

CRN 79-10-7  
CMF C3 H4 O2



L34 ANSWER 61 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2002:12648 USPATFULL

TITLE: Novel ester compounds, polymers, **resist**  
compositions and patterning process

INVENTOR(S): Nishi, Tsunehiro, Niigata-ken, JAPAN  
Hasegawa, Koji, Niigata-ken, JAPAN  
Watanabe, Takeru, Niigata-ken, JAPAN  
Kinsho, Takeshi, Niigata-ken, JAPAN  
Nakashima, Mutsuo, Niigata-ken, JAPAN  
Tachibana, Seiichiro, Niigata-ken, JAPAN  
Hatakeyama, Jun, Niigata-ken, JAPAN

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S.  
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002007031	A1	20020117
	US 6531627	B2	20030311
APPLICATION INFO.:	US 2001-842007	A1	20010426 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-127532	20000427
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON BLVD., SUITE 1400, ARLINGTON, VA, 22201	

NUMBER OF CLAIMS: 5  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 2 Drawing Page(s)  
LINE COUNT: 1531  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 370089-04-6P

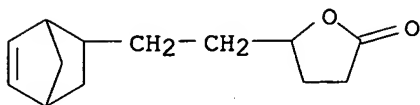
(preparation of ester compound and polymers for photoresist compns. and  
patterning process)

RN 370089-04-6 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 3-[(1-ethylcyclopentyl)oxy]-1-  
methyl-3-oxopropyl ester, polymer with 5-(2-bicyclo[2.2.1]hept-5-en-2-  
ylethyl)dihydro-2(3H)-furanone (9CI) (CA INDEX NAME)

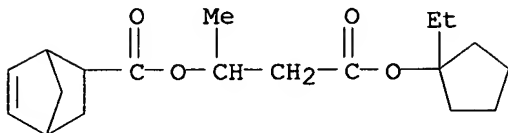
CM 1

CRN 370089-03-5  
CMF C13 H18 O2



CM 2

CRN 370088-90-7  
CMF C19 H28 O4



L34 ANSWER 62 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2002:239130 USPATFULL

TITLE: Modified polycyclic polymers

INVENTOR(S): Jayaraman, Saikumar, Twinsburg, OH, United States  
Benedikt, George Martin, Solon, OH, United States  
Rhodes, Larry Funderburk, Silver Lake, OH, United States

Vicari, Richard, Strongsville, OH, United States  
Allen, Robert David, San Jose, CA, United States  
DiPietro, Richard Anthony, San Jose, CA, United States  
Sooriyakumaran, Ratnam, San Jose, CA, United States  
Wallow, Thomas, Union City, CA, United States

PATENT ASSIGNEE(S): The B.F. Goodrich Company, Charlotte, NC, United States  
(U.S. corporation)  
International Business Machines Corp., Armonk, NY,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6451945	B1	20020917
APPLICATION INFO.:	US 1999-253499		19990219 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-75558P	19980223 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Moore, Margaret G.	
LEGAL REPRESENTATIVE:	Dunlap, Thoburn T., Hudak & Shunk Co., LPA	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)	
LINE COUNT:	1954	

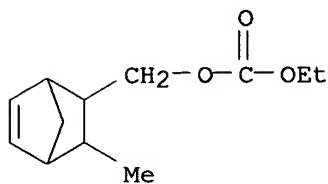
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 239137-09-8DP, hydrolyzed  
(modified polymers having polycyclic side chains for photoresists with improved hydrophilicity)

RN 239137-09-8 USPATFULL

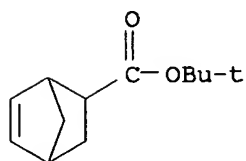
CN 1,4:5,8-Dimethanonaphthalene-2-carboxylic acid, 1,2,3,4,4a,5,8,8a-octahydro-, ethyl ester, polymer with 1,1-dimethylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate, ethyl (3-methylbicyclo[2.2.1]hept-5-en-2-yl)methyl carbonate and trimethylsilyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

CRN 239137-00-9  
CMF C12 H18 O3



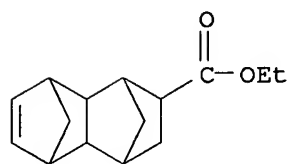
CM 2

CRN 154970-45-3  
CMF C12 H18 O2



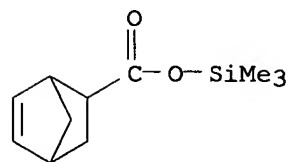
CM 3

CRN 61615-20-1  
CMF C15 H20 O2



CM 4

CRN 56151-01-0  
CMF C11 H18 O2 Si

[illegible]

PATENT ASSIGNEE(S):

Baik, Ki Ho, Kyoungki-do, KOREA, REPUBLIC OF  
Hyundai Electronics Industries Co., Ltd., KOREA,  
REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6426171	B1	20020730
APPLICATION INFO.:	US 2000-627714		20000728 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1999-31303	19990730
	KR 1999-31304	19990730

DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Ashton, Rosemary  
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP  
NUMBER OF CLAIMS: 26  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)  
LINE COUNT: 1080

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **332138-97-3P**

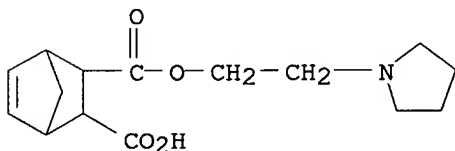
(copolymer in deep UV-sensitive resist composition)

RN 332138-97-3 USPTFULL

CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono[2-(1-pyrrolidinyl)ethyl] ester, polymer with bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate, 2,5-furandione and 2-hydroxyethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

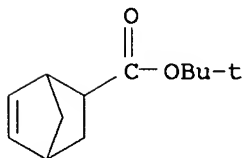
CM 1

CRN 332138-78-0  
CMF C15 H21 N O4



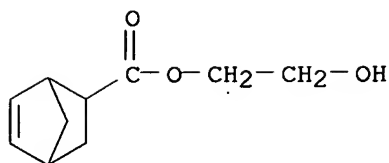
CM 2

CRN 154970-45-3  
CMF C12 H18 O2



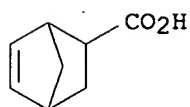
CM 3

CRN 37503-42-7  
CMF C10 H14 O3



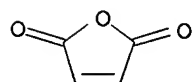
CM 4

CRN 120-74-1  
CMF C8 H10 O2



CM 5

CRN 108-31-6  
CMF C4 H2 O3



L34 ANSWER 64 OF 86 USPATFULL on STN  
ACCESSION NUMBER: 2002:174921 USPATFULL  
TITLE: **Resist** compositions and patterning process  
INVENTOR(S): Nishi, Tsunehiro, Nakakubiki-gun, JAPAN  
Ohsawa, Youichi, Nakakubiki-gun, JAPAN  
Hatakeyama, Jun, Nakakubiki-gun, JAPAN  
PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6420085	B1	20020716
APPLICATION INFO.:	US 2000-663830		20000915 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1999-263257	19990917
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Ashton, Rosemary	
LEGAL REPRESENTATIVE:	Millen, White, Zelano & Branigan, P.C.	
NUMBER OF CLAIMS:	14	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)	
LINE COUNT:	1276	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 330596-00-4

(resist comps. comprising sulfonium photoacid generator and copolymers for ArF laser lithog. and patterning process)

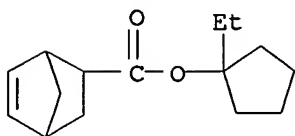
RN 330596-00-4 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1-ethylcyclopentyl ester, polymer with 1-ethylcyclopentyl 2-methyl-2-propenoate and 2,5-furandione (9CI) (CA INDEX NAME)



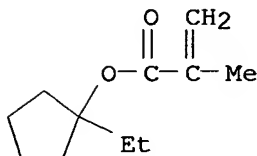
CM 1

CRN 279243-69-5  
CMF C15 H22 O2



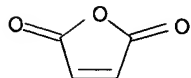
CM 2

CRN 266308-58-1  
CMF C11 H18 O2



CM 3

CRN 108-31-6  
CMF C4 H2 O3



L34 ANSWER 65 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2002:152742 USPATFULL

TITLE: **Photoresist** monomer having hydroxy group and carboxy group, copolymer thereof and

INVENTOR(S): **photoresist** composition using the same  
Lee, Geun Su, Kyoungki-do, KOREA, REPUBLIC OF  
Koh, Cha Won, Kyoungki-do, KOREA, REPUBLIC OF  
Jung, Jae Chang, Kyoungki-do, KOREA, REPUBLIC OF  
Jung, Min Ho, Kyoungki-do, KOREA, REPUBLIC OF  
Baik, Ki Ho, Kyoungki-do, KOREA, REPUBLIC OF  
PATENT ASSIGNEE(S): Hyundai Electronics Industries Co., Ltd., KOREA, REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6410670	B1	20020625
APPLICATION INFO.:	US 1999-383861		19990826 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1998-34694	19980826
	KR 1998-39079	19980921

DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Wu, David W.  
ASSISTANT EXAMINER: Zalukaeva, Tanya

LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP  
NUMBER OF CLAIMS: 9  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)  
LINE COUNT: 879  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 260065-43-8P

(preparation of photoresist copolymer using new photoresist-monomer for photoresist composition with submicron resolution)

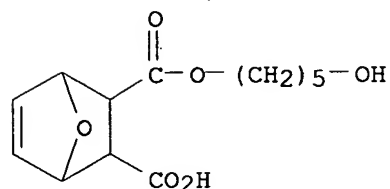
RN 260065-43-8 USPATFULL

CN 7-Oxabicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono(5-hydroxypentyl) ester, polymer with bicyclo[2.2.1]hept-2-ene, 1,1-dimethylethyl hydrogen bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 260065-28-9

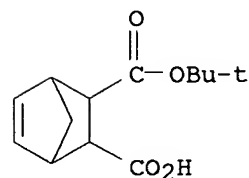
CMF C13 H18 O6



CM 2

CRN 76198-01-1

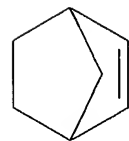
CMF C13 H18 O4



CM 3

CRN 498-66-8

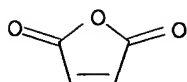
CMF C7 H10



CM 4

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 66 OF 86 USPATFULL on STN  
 ACCESSION NUMBER: 2002:136731 USPATFULL  
 TITLE: Cross-linker monomer comprising double bond and  
**photoresist** copolymer containing the same  
 INVENTOR(S): Lee, Geun Su, Kyoungki-do, KOREA, REPUBLIC OF  
 Jung, Jae Chang, Kyoungki-do, KOREA, REPUBLIC OF  
 Baik, Ki Ho, Kyoungki-do, KOREA, REPUBLIC OF  
 PATENT ASSIGNEE(S): Hyundai Electronics Industries Co., Ltd., KOREA,  
 REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6403281	B1	20020611
APPLICATION INFO.:	US 2000-643460		20000822 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1999-35046	19990823
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Ashton, Rosemary	
LEGAL REPRESENTATIVE:	Townsend and Townsend and Crew LLP	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)	
LINE COUNT:	530	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **328068-00-4P**, Mono-2-ethyl-2-(hydroxymethyl)-butylbicyclo-[2.2.1]-  
 hept-5-ene-2,3-dicarboxylate-maleic acid anhydride-norbornene-tert-  
 butylbicyclo-[2.2.1]-hept-5-ene-2-carboxylate-2,5-hexanediol diacrylate  
 copolymer  
 (preparation of photoresist copolymer containing crosslinking monomer with  
 double bond)

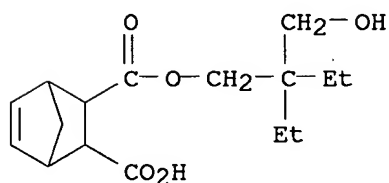
RN 328068-00-4 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono[2-ethyl-2-  
 (hydroxymethyl)butyl] ester, polymer with bicyclo[2.2.1]hept-2-ene,  
 1,4-dimethyl-1,4-butanediyl di-2-propenoate, 1,1-dimethylethyl  
 bicyclo[2.2.1]hept-5-ene-2-carboxylate and 2,5-furandione (9CI) (CA  
 INDEX NAME)

CM 1

CRN 250583-69-8

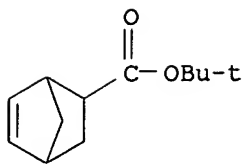
CMF C16 H24 O5



CM 2

CRN 154970-45-3

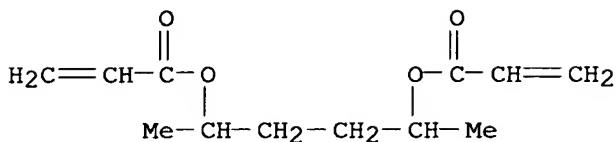
CMF C12 H18 O2



CM 3

CRN 85996-28-7

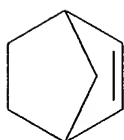
CMF C12 H18 O4



CM 4

CRN 498-66-8

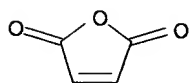
CMF C7 H10



CM 5

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 67 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 41

ACCESSION NUMBER: 2003:156547 HCAPLUS

DOCUMENT NUMBER: 138:385816

TITLE: Synthesis of a novel methacrylate,  
(1,4-dioxo-8-methacrylate amide spiro [4,5] decane)  
monomer and its co-polymerization with  
t-butyl-3 $\alpha$ -methacryloxy-7 $\alpha$ , 12 $\alpha$ -  
dihydroxy-5 $\beta$  cholan-24-oate for 193 nm

**photoresist**

AUTHOR(S): Karak, Niranjana; Ko, Jong Sung; Kim, Jin-Baek  
CORPORATE SOURCE: Department of Chemistry, Korea Advanced Institute of  
Sciences and Technology, Taejeon, 305701, S. Korea  
SOURCE: Journal of Polymer Materials (2002), 19(4), 365-372

CODEN: JOPME8; ISSN: 0970-0838

PUBLISHER: Oxford & IBH Publishing Co. Pvt. Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

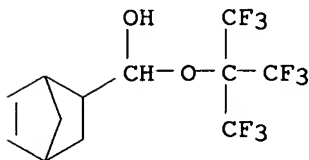
IT 525558-73-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

photoresist)

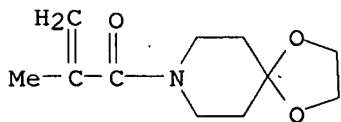
CN Cholan-24-oic acid, 7,12-dihydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]-, 1,1-dimethylethyl ester, (3 $\alpha$ ,5 $\beta$ ,7 $\alpha$ ,12 $\alpha$ )-, polymer with 2,5-furandione, 8-(2-methyl-1-oxo-2-propenyl)-1,4-dioxo-8-azaspiro[4.5]decane and  $\alpha$ -[2,2,2-trifluoro-1,1-bis(trifluoromethyl)ethoxy]bicyclo[2.2.1]hept-5-ene-2-methanol (9CI) (CA INDEX NAME)

CRN 525558-70-7  
CMF C12 H11 F9 O2



CRN 525558-69-4  
CMF C32 H52 O6

CRN 525558-68-3  
CMF C11 H17 N O3



CRN 108-31-6



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

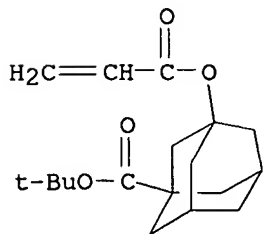
L34 ANSWER 68 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 42  
 ACCESSION NUMBER: 2001:582183 HCAPLUS  
 DOCUMENT NUMBER: 135:160158  
 TITLE: Polymeric compound for **photoresist** and resin composition for **photoresist**  
 INVENTOR(S): Funaki, Yoshinori; Tsutsumi, Kiyoharu; Takaragi, Akira  
 PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan  
 SOURCE: PCT Int. Appl., 120 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001057597	A1	20010809	WO 2001-JP515	20010126
W: KR, US				
RW: DE, FR, GB				
JP 2001215703	A2	20010810	JP 2000-24527	20000201
EP 1172694	A1	20020116	EP 2001-949041	20010126
R: DE, FR, GB				
TW 538311	B	20030621	TW 2001-90101862	20010131
US 2002169266	A1	20021114	US 2001-937910	20011019
US 6552143	B2	20030422		
US 2004006189	A1	20040108	US 2003-375129	20030228
US 6806335	B2	20041019		
PRIORITY APPLN. INFO.:			JP 2000-24527	A 20000201
			WO 2001-JP515	W 20010126
			US 2001-937910	A1 20011019

IT **353289-59-5P**  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polymeric compound for **photoresist** and resin composition for **photoresist**)  
 RN 353289-59-5 HCAPLUS  
 CN Tricyclo[3.3.1.1<sup>3,7</sup>]decane-1-carboxylic acid, 3-[(1-oxo-2-propenyl)oxy]-, 1,1-dimethylethyl ester, polymer with 2,5-furandione, 3-hydroxytricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl 2-propenoate and 3a,4,7,7a-tetrahydro-4,7-methanoisobenzofuran-1(3H)-one (9CI) (CA INDEX NAME)

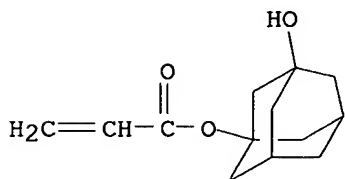
CM 1

CRN 251563-20-9  
 CMF C18 H26 O4



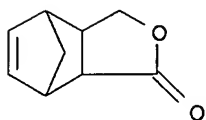
CM 2

CRN 216581-76-9  
CMF C13 H18 O3



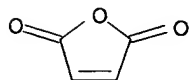
CM 3

CRN 85718-44-1  
CMF C9 H10 O2



CM 4

CRN 108-31-6  
CMF C4 H2 O3



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 69 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 43

ACCESSION NUMBER: 2001:713843 HCAPLUS

DOCUMENT NUMBER: 135:264568

TITLE: Photosensitive polymer including copolymer of alkyl vinyl ether and **resist** composition containing the same

INVENTOR(S): Choi, Sang-jun; Kim, Hyun-woo

PATENT ASSIGNEE(S): Samsung Electronics Co., Ltd., S. Korea

SOURCE: U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U. S. Ser. No. 576,053.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001024763	A1	20010927	US 2001-764150	20010119
US 6673513	B2	20040106		
KR 2001076138	A	20010811	KR 2000-20603	20000419
US 6517990	B1	20030211	US 2000-576053	20000523
US 2003194643	A1	20031016	US 2003-392931	20030321
US 6833230	B2	20041221		
US 2004137363	A1	20040715	US 2003-704977	20031112

PRIORITY APPLN. INFO.:

KR 2000-2489	A	20000119
KR 2000-20603	A	20000419
US 2000-198761P	P	20000421
US 2000-576053	A2	20000523
US 2001-764150	A2	20010119
KR 2002-34998	A	20020621

IT 350992-45-9P

RL: POF (Polymer in formulation); SPN (Synthetic preparation); TEM  
(Technical or engineered material use); PREP (Preparation); USES (Uses)  
(synthesis of photosensitive copolymer of alkyl vinyl ether and maleic  
anhydride for **resist** composition)

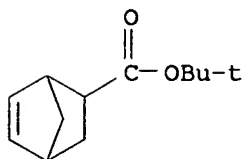
RN 350992-45-9 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylethyl ester,  
polymer with 3,4-dihydro-2H-pyran and 2,5-furandione (9CI) (CA INDEX  
NAME)

CM 1

CRN 154970-45-3

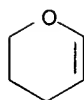
CMF C12 H18 O2



CM 2

CRN 110-87-2

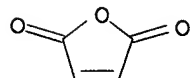
CMF C5 H8 O



CM 3

CRN 108-31-6

CMF C4 H2 O3



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 70 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 44

ACCESSION NUMBER: 2001:534446 HCAPLUS

DOCUMENT NUMBER: 135:129569

TITLE: Chemically amplified **photoresist**  
compositions containing alkyl vinyl ether polymers for  
ArF excimer laser exposure

INVENTOR(S): Choi, Sang Joon; Kim, Hyun Woo

PATENT ASSIGNEE(S): Samsung Electronics Co., Ltd., S. Korea

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF



DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001200016	A2	20010724	JP 2001-12171	20010119
KR 2001076138	A	20010811	KR 2000-20603	20000419
EP 1120689	A2	20010801	EP 2001-300418	20010118
EP 1120689	A3	20010808		

R: AT, BE, CH, DE, DK, ES, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE,  
SI, LT, LV, FI, RO

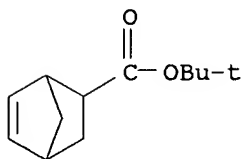
PRIORITY APPLN. INFO.: KR 2000-2489 A 20000119  
KR 2000-20603 A 20000419

IT 350992-45-9P  
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(chemical amplified **photoresists** containing alkyl vinyl ether polymers for ArF excimer laser exposure)

RN 350992-45-9 HCAPLUS  
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1,1-dimethylethyl ester, polymer with 3,4-dihydro-2H-pyran and 2,5-furandione (9CI) (CA INDEX NAME)

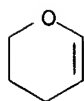
CM 1

CRN 154970-45-3  
CMF C12 H18 O2



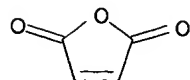
CM 2

CRN 110-87-2  
CMF C5 H8 O



CM 3

CRN 108-31-6  
CMF C4 H2 O3



TITLE: Monomer for copolymer in deep UV-sensitive  
**resist** composition for semiconductor device  
 fabrication and method for preparation thereof

INVENTOR(S): Chung, Min Ho; Chung, Jae Chang; Lee, Geun Soo; Paek,  
 Ki Ho

PATENT ASSIGNEE(S): Hyundai Electronics Industries Co., Ltd., S. Korea;  
 Hynix Semiconductor Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.  
 CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001089539	A2	20010403	JP 2000-231613	20000731
JP 3515949	B2	20040405		
KR 2001011773	A	20010215	KR 1999-31303	19990730
KR 2001011774	A	20010215	KR 1999-31304	19990730
US 6426171	B1	20020730	US 2000-627714	20000728
PRIORITY APPLN. INFO.:			KR 1999-31303	A 19990730
			KR 1999-31304	A 19990730

OTHER SOURCE(S): MARPAT 134:287851

IT **332138-97-3P**

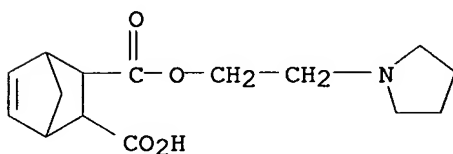
RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (copolymer in deep UV-sensitive **resist** composition)

RN 332138-97-3 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono[2-(1-  
 pyrrolidinyl)ethyl] ester, polymer with bicyclo[2.2.1]hept-5-ene-2-  
 carboxylic acid, 1,1-dimethylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate,  
 2,5-furandione and 2-hydroxyethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate  
 (9CI) (CA INDEX NAME)

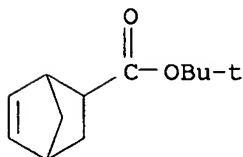
CM 1

CRN 332138-78-0  
 CMF C15 H21 N O4



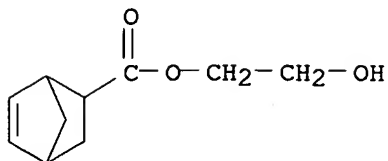
CM 2

CRN 154970-45-3  
 CMF C12 H18 O2



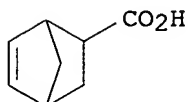
CM 3

CRN 37503-42-7



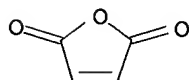
CM 4

CRN 120-74-1  
CMF C8 H10 O2



CM 5

CRN 108-31-6  
CMF C4 H2 O3



L34 ANSWER 72 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 46

ACCESSION NUMBER: 2001:217905 HCAPLUS  
DOCUMENT NUMBER: 134:259208  
TITLE: Photosensitive polymer and **resist** composition containing it  
INVENTOR(S): Choi, Sang Joon  
PATENT ASSIGNEE(S): Samsung Electronics Co., Ltd., S. Korea  
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001081140	A2	20010327	JP 2000-231005	20000731
US 6270942	B1	20010807	US 2000-539138	20000330
PRIORITY APPLN. INFO.:			KR 1999-31059	A 19990729

IT **331449-17-3P**

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

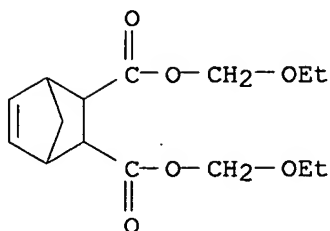
(**photoresist** composition containing polymer with alicyclic backbone and photoacid generator)

RN 331449-17-3 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, bis(ethoxymethyl) ester, polymer with 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

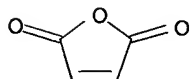
CRN 331449-14-0



CM 2

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 73 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 47

ACCESSION NUMBER: 2001:796274 HCAPLUS

DOCUMENT NUMBER: 135:336914

TITLE: Ester compounds, polymers, **resist**  
compositions and patterning processINVENTOR(S): Hasegawa, Koji; Nishi, Tsunehiro; Kinsho, Takeshi;  
Watanabe, Takeru; Nakashima, Mutsuo; Tachibana,  
Seiichiro; Hatakeyama, Jun

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 45 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1149825	A2	20011031	EP 2001-303867	20010427
EP 1149825	A3	20030326		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002012622	A2	20020115	JP 2001-124005	20010423
US 2002007031	A1	20020117	US 2001-842007	20010426
US 6531627	B2	20030311		
US 2003088115	A1	20030508	US 2002-288514	20021106
US 6670498	B2	20031230		
PRIORITY APPLN. INFO.:			JP 2000-127532	A 20000427
			US 2001-842007	A3 20010426

OTHER SOURCE(S): MARPAT 135:336914

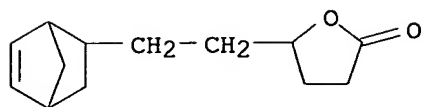
IT **370089-04-6P**RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)(preparation of ester compound and polymers for **photoresist** compns.  
and patterning process)

RN 370089-04-6 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 3-[(1-ethylcyclopentyl)oxy]-1-  
methyl-3-oxopropyl ester, polymer with 5-(2-bicyclo[2.2.1]hept-5-en-2-  
ylethyl)dihydro-2(3H)-furanone (9CI) (CA INDEX NAME)

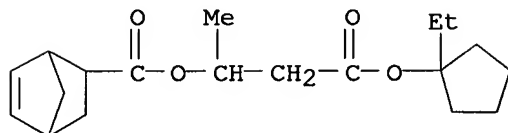
CM 1

CRN 370089-03-5  
CMF C13 H18 O2



CM 2

CRN 370088-90-7  
CMF C19 H28 O4



L34 ANSWER 74 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 48

ACCESSION NUMBER: 2001:631979 HCAPLUS

DOCUMENT NUMBER: 135:187722

TITLE: **Photoresist** compositions comprising novel copolymers

INVENTOR(S): Barclay, George G.; Caporale, Stefan J.; Yueh, Wang; Mao, Zhibiao; Mattia, Joseph

PATENT ASSIGNEE(S): Shipley Company L.L.C., USA

SOURCE: Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1128213	A2	20010829	EP 2001-301613	20010222
EP 1128213	A3	20031119		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6777157	B1	20040817	US 2000-567814	20000509
TW 584781	B	20040421	TW 2001-90104232	20010223
JP 2001296663	A2	20011026	JP 2001-50681	20010226
US 2003215742	A1	20031120	US 2003-408522	20030407
US 6849381	B2	20050201		
PRIORITY APPLN. INFO.:			US 2000-185345P	P 20000226
			US 2000-567814	A 20000509

IT **355395-09-4P**

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

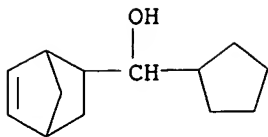
(**photoresist** composition containing photoacid labile acrylate and cyclic olefin)

RN 355395-09-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-methyltricyclo[3.3.1.1<sup>3,7</sup>]dec-2-yl ester, polymer with bicyclo[2.2.1]hept-2-ene,  $\alpha$ -cyclopentylbicyclo[2.2.1]hept-2-ene-2-methanol and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

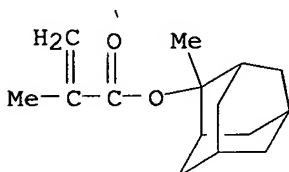
CRN 355395-08-3  
CMF C13 H20 O



CM 2

CRN 177080-67-0

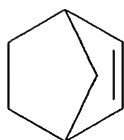
CMF C15 H22 O2



CM 3

CRN 498-66-8

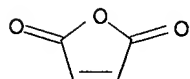
CMF C7 H10



CM 4

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 75 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 49

ACCESSION NUMBER: 2001:208018 HCAPLUS

DOCUMENT NUMBER: 134:259202

TITLE: **Resist** compositions comprising sulfonium photoacid generator for ArF excimer laser lithography and patterning process

INVENTOR(S): Nishi, Tsunehiro; Ohsawa, Youichi; Hatakeyama, Jun

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 36 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

EP 1085377 A1 20010321 EP 2000-307915 20000913  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO  
 JP 2001083695 A2 20010330 JP 1999-263257 19990917  
 US 6420085 B1 20020716 US 2000-663830 20000915  
 PRIORITY APPLN. INFO.: JP 1999-263257 A 19990917  
 OTHER SOURCE(S): MARPAT 134:259202

IT 330596-00-4

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(**resist** compns. comprising sulfonium photoacid generator and copolymers for ArF laser lithog. and patterning process)

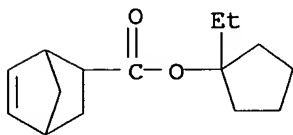
RN 330596-00-4 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, 1-ethylcyclopentyl ester, polymer with 1-ethylcyclopentyl 2-methyl-2-propenoate and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 279243-69-5

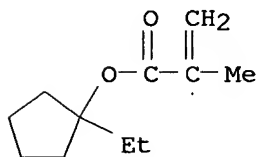
CMF C15 H22 O2



CM 2

CRN 266308-58-1

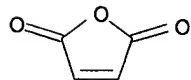
CMF C11 H18 O2



CM 3

CRN 108-31-6

CMF C4 H2 O3



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 76 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 50

ACCESSION NUMBER: 2001:150535 HCAPLUS

DOCUMENT NUMBER: 134:200535

TITLE: Crosslinking monomer containing double bond and photoresist copolymer containing the same

INVENTOR(S): Lee, Geun Su; Jung, Jae Chang; Baik, Ki Ho

PATENT ASSIGNEE(S): Hyundai Electronics Industries Co., Ltd., Ichon, S. Korea

SOURCE: Ger. Offen., 16 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

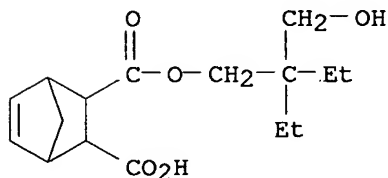
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10040963	A1	20010301	DE 2000-10040963	20000822
KR 2001018905	A	20010315	KR 1999-35046	19990823
GB 2354004	A1	20010314	GB 2000-19436	20000809
GB 2354004	B2	20040114		
JP 2001106737	A2	20010417	JP 2000-252762	20000823
PRIORITY APPLN. INFO.:			KR 1999-35046	A 19990823

IT **328068-00-4P**, Mono-2-ethyl-2-(hydroxymethyl)-butylbicyclo-[2.2.1]-hept-5-ene-2,3-dicarboxylate-maleic acid anhydride-norbornene-tert-butylbicyclo-[2.2.1]-hept-5-ene-2-carboxylate-2,5-hexanediol diacrylate copolymer  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (preparation of **photoresist** copolymer containing crosslinking monomer with double bond)

RN 328068-00-4 HCAPLUS  
 CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono[2-ethyl-2-(hydroxymethyl)butyl] ester, polymer with bicyclo[2.2.1]hept-2-ene, 1,4-dimethyl-1,4-butanediyl di-2-propenoate, 1,1-dimethylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate and 2,5-furandione (9CI) (CA INDEX NAME)

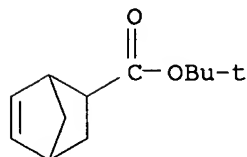
CM 1

CRN 250583-69-8  
 CMF C16 H24 O5



CM 2

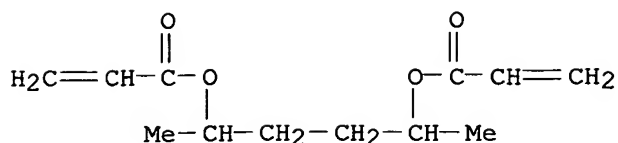
CRN 154970-45-3  
 CMF C12 H18 O2



CM 3

CRN 85996-28-7  
 CMF C12 H18 O4

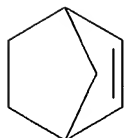




CM 4

CRN 498-66-8

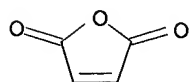
CMF C7 H10



CM 5

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 77 OF 86 USPATFULL on STN  
 ACCESSION NUMBER: 2001:214807 USPATFULL  
 TITLE: **Photoresist** cross-linker and **photoresist** composition comprising the same  
 INVENTOR(S): Jung, Jae Chang, Kyoungki-do, Korea, Republic of  
 Kong, Keun Kyu, Kwangju, Korea, Republic of  
 Kim, Jin Soo, Daejeon, Korea, Republic of  
 Baik, Ki Ho, Kyoungki-do, Korea, Republic of  
 PATENT ASSIGNEE(S): Hyundai Electronics Industries Co., Ltd., Korea, Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6322948	B1	20011127
APPLICATION INFO.:	US 2000-499231		20000207 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1999-4593	19990210
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Ashton, Rosemary	
LEGAL REPRESENTATIVE:	Townsend and Townsend and Crew LLP	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	10 Drawing Figure(s); 5 Drawing Page(s)	
LINE COUNT:	555	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 288619-55-6P

(crosslinking agent; norbornene derivative polymers as crosslinking agents for photoresists and their use in semiconductor device fabrication)

RN 288619-55-6 USPATFULL

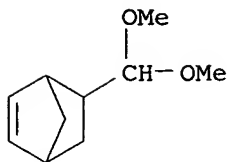
CN 2-Propenoic acid, polymer with 5-(dimethoxymethyl)bicyclo[2.2.1]hept-2-ene

and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 69448-18-6

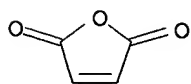
CMF C10 H16 O2



CM 2

CRN 108-31-6

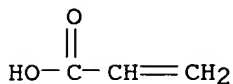
CMF C4 H2 O3



CM 3

CRN 79-10-7

CMF C3 H4 O2



L34 ANSWER 78 OF 86 USPATFULL on STN  
ACCESSION NUMBER: 2001:179213 USPATFULL  
TITLE: Polycyclic copolymer compositions  
INVENTOR(S): Goodall, Brian Leslie, Baton Rouge, LA, United States  
McIntosh, III, Lester Howard, Cuyahoga Falls, OH,  
United States  
PATENT ASSIGNEE(S): The B. F. Goodrich Company, Brecksville, OH, United  
States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6303724	B1	20011016
APPLICATION INFO.:	US 1999-345286		19990630 (9)

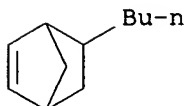
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-91361P	19980701 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Wu, David W.	
ASSISTANT EXAMINER:	Cheung, William	
LEGAL REPRESENTATIVE:	Dunlap, Thoburn T. Hudak & Shunk Co., L.P.A.	
NUMBER OF CLAIMS:	8	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Figure(s); 3 Drawing Page(s)	
LINE COUNT:	1296	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 254751-22-9P  
(polycyclic copolymer compns.)  
RN 254751-22-9 USPATFULL  
CN 2-Propenoic acid, methyl ester, polymer with 5-butylbicyclo[2.2.1]hept-2-ene (9CI) (CA INDEX NAME)

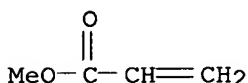
CM 1

CRN 22094-81-1  
CMF C11 H18



CM 2

CRN 96-33-3  
CMF C4 H6 O2



L34 ANSWER 79 OF 86 USPATFULL on STN  
ACCESSION NUMBER: 2001:147641 USPATFULL  
TITLE: Ester compounds, polymers, **resist** compositions and patterning process  
INVENTOR(S): Kinsho, Takeshi, Nakakubiki-gun, Japan  
Nishi, Tsunehiro, Nakakubiki-gun, Japan  
Kurihara, Hideshi, Usui-gun, Japan  
Nakashima, Mutsuo, Nakakubiki-gun, Japan  
Hasegawa, Koji, Nakakubiki-gun, Japan  
Watanabe, Takeru, Nakakubiki-gun, Japan  
PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6284429	B1	20010904
APPLICATION INFO.:	US 2000-512108		20000224 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1999-47406	19990225
	JP 1999-174945	19990622

DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Ashton, Rosemary E.  
LEGAL REPRESENTATIVE: Millen, White, Zelano & Branigan, P.C  
NUMBER OF CLAIMS: 19  
EXEMPLARY CLAIM: 1  
LINE COUNT: 2016

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 290809-04-0P  
(novel ester compds., polymers, resist compns. and patterning process)

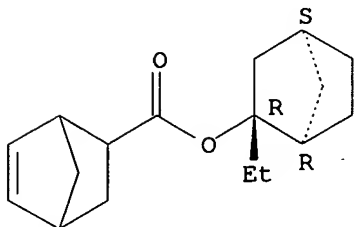
RN 290809-04-0 USPATFULL  
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, (1R,2R,4S)-2-ethylbicyclo[2.2.1]hept-2-yl ester, rel-, polymer with rel-(3aR,4S,5R,7S,7aR)-5-ethyloctahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 290808-30-9

CMF C17 H24 O2

Relative stereochemistry.

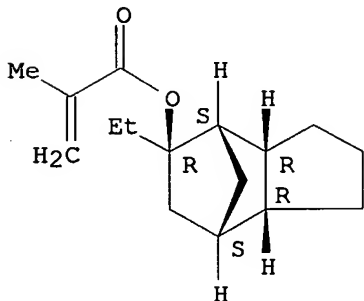


CM 2

CRN 271598-65-3

CMF C16 H24 O2

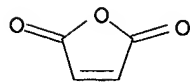
Relative stereochemistry.



CM 3

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 80 OF 86 USPATFULL on STN

ACCESSION NUMBER: 2001:125716 USPATFULL

TITLE: Photosensitive polymer having cyclic backbone and **resist** composition comprising the same

INVENTOR(S): Choi, Sang-jun, Seoul, Korea, Republic of

PATENT ASSIGNEE(S): Samsung Electronics Co., LTD, Korea, Republic of  
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6270942	B1	20010807
APPLICATION INFO.:	US 2000-539138		20000330 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1999-31059	19990729

DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Ashton, Rosemary E.  
LEGAL REPRESENTATIVE: Mills & Onello LLP  
NUMBER OF CLAIMS: 11  
EXEMPLARY CLAIM: 4  
LINE COUNT: 497  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 331449-17-3P

(photoresist composition containing polymer with alicyclic backbone and photoacid generator)

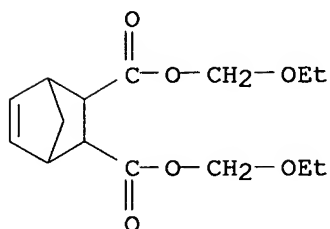
RN 331449-17-3 USPATFULL

CN Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, bis(ethoxymethyl) ester, polymer with 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 331449-14-0

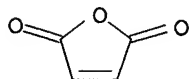
CMF C15 H22 O6



CM 2

CRN 108-31-6

CMF C4 H2 O3



L34 ANSWER 81 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 51

ACCESSION NUMBER: 2000:210534 HCAPLUS

DOCUMENT NUMBER: 132:258158

TITLE: **Photoresist** for microlithography

INVENTOR(S): Feiring, Andrew Edward; Feldman, Jerald

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000017712	A1	20000330	WO 1999-US21912	19990921
W:	AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9960560	A1	20000410	AU 1999-60560	19990921

EP 1131677	A1	20010912	EP 1999-969504	19990921
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002525683	T2	20020813	JP 2000-571312	19990921
US 6593058	B1	20030715	US 2001-806096	20010323
US 2004023150	A1	20040205	US 2002-108935	20020327
US 6849377	B2	20050201		
US 2004023152	A1	20040205	US 2003-437760	20030514
PRIORITY APPLN. INFO.:			US 1998-101502P	P 19980923
			US 1999-120045P	P 19990212
			WO 1999-US21912	W 19990921
			US 2001-806096	A2 20010323
			US 2001-280268P	P 20010330

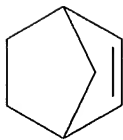
IT **262617-09-4P**, Norbornene-5-norbornene-2-carboxylic acid-tetrafluoroethylene copolymer  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (preparation and use in preparing UV **photoresists** for microlithog.)

RN 262617-09-4 HCAPLUS

CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, polymer with bicyclo[2.2.1]hept-2-ene and tetrafluoroethene (9CI) (CA INDEX NAME)

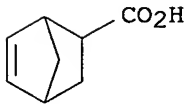
CM 1

CRN 498-66-8  
 CMF C7 H10



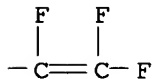
CM 2

CRN 120-74-1  
 CMF C8 H10 O2



CM 3

CRN 116-14-3  
 CMF C2 F4



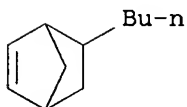
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 82 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 52  
 ACCESSION NUMBER: 2000:34921 HCAPLUS  
 DOCUMENT NUMBER: 132:93814  
 TITLE: Polycyclic copolymer compositions  
 INVENTOR(S): Goodall, Brian L.; McIntosh, Lester H., III

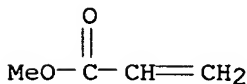
PATENT ASSIGNEE(S): The B.F. Goodrich Company, USA  
SOURCE: PCT Int. Appl., 55 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000001747	A1	20000113	WO 1999-US13903	19990618
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9948263	A1	20000124	AU 1999-48263	19990618
EP 1093480	A1	20010425	EP 1999-931841	19990618
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002519487	T2	20020702	JP 2000-558145	19990618
US 6303724	B1	20011016	US 1999-345286	19990630
PRIORITY APPLN. INFO.:			US 1998-91361P	P 19980701
			WO 1999-US13903	W 19990618

IT **254751-22-9P**  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(polycyclic copolymer compns.)  
RN 254751-22-9 HCAPLUS  
CN 2-Propenoic acid, methyl ester, polymer with 5-butylbicyclo[2.2.1]hept-2-ene (9CI) (CA INDEX NAME)  
  
CM 1  
  
CRN 22094-81-1  
CMF C11 H18



CM 2  
  
CRN 96-33-3  
CMF C4 H6 O2



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 83 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 53  
ACCESSION NUMBER: 2000:587079 HCAPLUS  
DOCUMENT NUMBER: 133:185543  
TITLE: Monomers for **photoresist** crosslinking agents, **photoresist** crosslinking agents, **photoresist** compositions, patterning of **photoresist** compositions, and semiconductor devices

INVENTOR(S): Chung, Jae Chang; Kong, Geun Kyu; Kim, Jin Soo; Paek, Ki Ho  
 PATENT ASSIGNEE(S): Hyundai Electronics Industries Co., Ltd., S. Korea  
 SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000231191	A2	20000822	JP 2000-32228	20000209
KR 2000055772	A	20000915	KR 1999-4593	19990210
TW 528929	B	20030421	TW 2000-89101778	20000202
US 6322948	B1	20011127	US 2000-499231	20000207
PRIORITY APPLN. INFO.:			KR 1999-4593	A 19990210
OTHER SOURCE(S):	MARPAT 133:185543			

IT **288619-55-6P**

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process); USES (Uses)  
 (crosslinking agent; norbornene derivative polymers as crosslinking agents for **photoresists** and their use in semiconductor device fabrication)

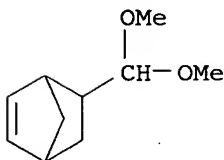
RN 288619-55-6 HCAPLUS

CN 2-Propenoic acid, polymer with 5-(dimethoxymethyl)bicyclo[2.2.1]hept-2-ene and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 69448-18-6

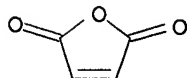
CMF C10 H16 O2



CM 2

CRN 108-31-6

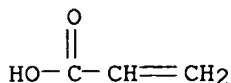
CMF C4 H2 O3



CM 3

CRN 79-10-7

CMF C3 H4 O2





ACCESSION NUMBER: 2000:608477 HCAPLUS

DOCUMENT NUMBER: 133:215453

TITLE: Novel ester compounds, polymers, **resist** compositions and patterning process

INVENTOR(S): Kinsho, Takeshi; Nishi, Tsunehiro; Kurihara, Hideshi; Nakashima, Mutsuo; Hasegawa, Koji; Watanabe, Takeru

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 71 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1031879	A1	20000830	EP 2000-301523	20000225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2000309611	A2	20001107	JP 1999-174945	19990622
KR 2000058167	A	20000925	KR 2000-8963	20000224
US 6284429	B1	20010904	US 2000-512108	20000224
PRIORITY APPLN. INFO.:			JP 1999-47406	A 19990225
			JP 1999-174945	A 19990622

IT 290809-04-0P

RL: POF (Polymer in formulation); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (novel ester compds., polymers, **resist** compns. and patterning process)

RN 290809-04-0 HCAPLUS

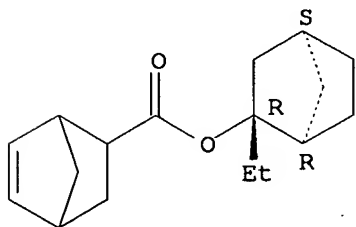
CN Bicyclo[2.2.1]hept-5-ene-2-carboxylic acid, (1R,2R,4S)-2-ethylbicyclo[2.2.1]hept-2-yl ester, rel-, polymer with rel-(3aR,4S,5R,7S,7aR)-5-ethyloctahydro-4,7-methano-1H-inden-5-yl 2-methyl-2-propenoate and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 290808-30-9

CMF C17 H24 O2

Relative stereochemistry.

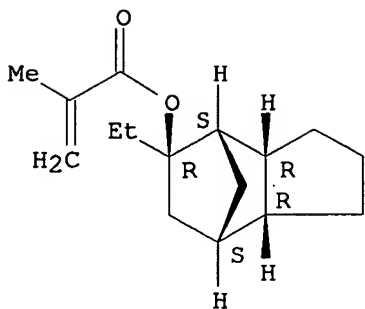


CM 2

CRN 271598-65-3

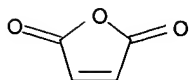
CMF C16 H24 O2

Relative stereochemistry.



CM 3

CRN 108-31-6  
CMF C4 H2 O3



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 85 OF 86 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 55

ACCESSION NUMBER: 2000:157963 HCAPLUS

DOCUMENT NUMBER: 132:201051

TITLE: New **photoresist**-monomer with hydroxy groups and carboxyl groups, copolymer and **photoresist** composition using the same

INVENTOR(S): Lee, Geun Su; Koh, Cha Won; Jung, Jae Chang; Jung, Min Ho; Baik, Ki Ho

PATENT ASSIGNEE(S): Hyundai Electronics Industries Co., Ltd., Ichon, S. Korea

SOURCE: Ger. Offen., 28 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19940516	A1	20000309	DE 1999-19940516	19990826
KR 2000015013	A	20000315	KR 1998-34694	19980826
KR 2000020467	A	20000415	KR 1998-39079	19980921
JP 2000086726	A2	20000328	JP 1999-238931	19990825
JP 3587743	B2	20041110		
NL 1012916	A1	20000229	NL 1999-1012916	19990826
NL 1012916	C2	20021203		
GB 2340831	A1	20000301	GB 1999-20124	19990826
GB 2340831	B2	20040512		
FR 2782715	A1	20000303	FR 1999-10819	19990826
FR 2782715	B1	20040910		
CN 1247858	A	20000322	CN 1999-118357	19990826
IT 1307051	B1	20011023	IT 1999-TO725	19990826
US 6410670	B1	20020625	US 1999-383861	19990826
TW 535033	B	20030601	TW 1999-88114597	19990826
US 2002091216	A1	20020711	US 2002-79753	20020219
US 6586619	B2	20030701		
PRIORITY APPLN. INFO.:			KR 1998-34694	A 19980826
			KR 1998-39079	A 19980921
			US 1999-383861	A3 19990826

OTHER SOURCE(S):

MARPAT 132:201051

IT 260065-43-8P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation of **photoresist** copolymer using new **photoresist**-monomer for **photoresist** composition with submicron resolution)

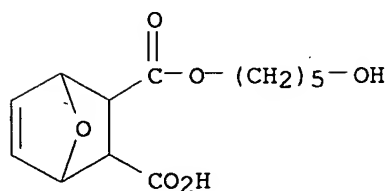
RN 260065-43-8 HCAPLUS

CN 7-Oxabicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic acid, mono(5-hydroxypentyl) ester, polymer with bicyclo[2.2.1]hept-2-ene, 1,1-dimethylethyl hydrogen bicyclo[2.2.1]hept-5-ene-2,3-dicarboxylate and 2,5-furandione (9CI) (CA INDEX NAME)

CM 1

CRN 260065-28-9

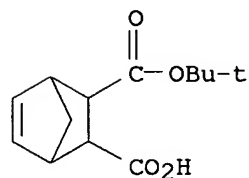
CMF C13 H18 O6



CM 2

CRN 76198-01-1

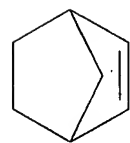
CMF C13 H18 O4



CM 3

CRN 498-66-8

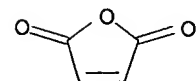
CMF C7 H10



CM 4

CRN 108-31-6

CMF C4 H2 O3



ACCESSION NUMBER: 1999:549311 HCAPLUS  
 DOCUMENT NUMBER: 131:170800  
 TITLE: Modified polymers having polycyclic side chains  
 INVENTOR(S): Jayaraman, Saikumar; Benedikt, George M.; Rhodes, Larry F.; Vicari, Richard; Allen, Robert D.; Dipietro, Richard A.; Sooriyakumaran, Ratnam; Wallow, Thomas  
 PATENT ASSIGNEE(S): The B.F. Goodrich Company, USA  
 SOURCE: PCT Int. Appl., 84 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9942510	A1	19990826	WO 1999-US3771	19990219
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9928724	A1	19990906	AU 1999-28724	19990219
EP 1060206	A1	20001220	EP 1999-909541	19990219
EP 1060206	B1	20040414		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002504577	T2	20020212	JP 2000-532461	19990219
US 6451945	B1	20020917	US 1999-253499	19990219
AT 264352	E	20040415	AT 1999-909541	19990219
TW 565575	B	20031211	TW 1999-88102555	19990407
US 2003018153	A1	20030123	US 2002-224994	20020821
US 6794459	B2	20040921		
PRIORITY APPLN. INFO.:			US 1998-75558P	P 19980223
			US 1999-253499	A3 19990219
			WO 1999-US3771	W 19990219

IT 239137-09-8DP, hydrolyzed

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(modified polymers having polycyclic side chains for photoresists with improved hydrophilicity)

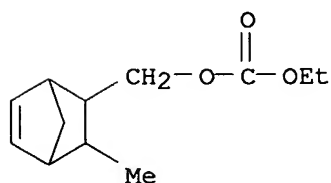
RN 239137-09-8 HCAPLUS

CN 1,4:5,8-Dimethanonaphthalene-2-carboxylic acid, 1,2,3,4,4a,5,8,8a-octahydro-, ethyl ester, polymer with 1,1-dimethylethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate, ethyl (3-methylbicyclo[2.2.1]hept-5-en-2-yl)methyl carbonate and trimethylsilyl bicyclo[2.2.1]hept-5-ene-2-carboxylate (9CI) (CA INDEX NAME)

CM 1

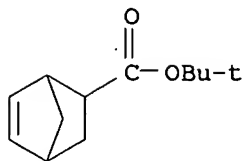
CRN 239137-00-9

CMF C12 H18 O3



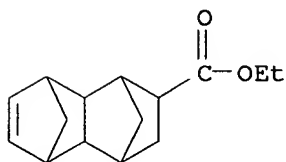
CM 2

CRN 154970-45-3  
CMF C12 H18 O2



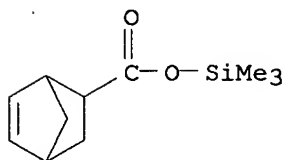
CM 3

CRN 61615-20-1  
CMF C15 H20 O2



CM 4

CRN 56151-01-0  
CMF C11 H18 O2 Si



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 12:14:41 ON 07 MAR 2005)

FILE 'REGISTRY' ENTERED AT 12:15:00 ON 07 MAR 2005

L1	SCREEN 2067
L2	STRUCTURE UPLOADED
L3	QUE L2 AND L1
L4	0 S L3 SSS SAM
L5	SCREEN 2067
L6	STRUCTURE UPLOADED
L7	QUE L6 AND L5
L8	0 S L7 SSS SAM
L9	SCREEN 2067
L10	STRUCTURE UPLOADED
L11	QUE L10 AND L9
L12	50 S L11 SSS SAM
L13	SCREEN 2067
L14	STRUCTURE UPLOADED
L15	QUE L14 AND L13

L16 50 S L15 SSS SAM  
 L17 SCREEN 2067  
 L18 STRUCTURE UPLOADED  
 L19 QUE L18 AND L17  
 L20 SCREEN 2067  
 L21 STRUCTURE UPLOADED  
 L22 QUE L21 AND L20  
 L23 SCREEN 2067  
 L24 STRUCTURE UPLOADED  
 L25 QUE L24 AND L23  
 L26 4 S L25 SSS SAM  
 L27 SCREEN 2067  
 L28 STRUCTURE UPLOADED  
 L29 QUE L28 AND L27  
 L30 0 S L29 SSS SAM

FILE 'HCAPLUS, CAPLUS, USPATFULL' ENTERED AT 12:22:28 ON 07 MAR 2005

L31 233 S L4 OR L8 OR L12 OR L16 OR L26 OR L30  
 L32 454502 S PHOTORESIST OR RESIST  
 L33 148 S L31 AND L32  
 L34 86 DUPLICATE REMOVE L33 (62 DUPLICATES REMOVED)

=> s 14

L35 0 L4

=> s 18

L36 0 L8

=> s 112

L37 210 L12

=> d

L37 ANSWER 1 OF 210 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2005:123212 HCAPLUS  
 DN 142:198529  
 TI Low polydispersity resin and preparation thereof using chain-transfer agents  
 IN Lee, Ting-Yu; Yu, Choa-Ying; Hsu, Meei-Yu; Wang, Shian-Jy; Ting, Ching; Shih, Kuo-Chen  
 PA Taiwan  
 SO U.S. Pat. Appl. Publ., 13 pp.  
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PI	US 2005032997	A1	20050210	US 2003-714052	20031114
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COST IN U.S. DOLLARS

SINCE FILE  
ENTRY

TOTAL  
SESSION

FULL ESTIMATED COST

343.65

349.02

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